DOCUMENT RESUME

ED 305 818 EC 212 769

AUTHOR	McLaughlin, Margaret J.; And Others
TITLE	Personnel To Educate the Handicapped in America: A Status Report.
INSTITUTION	Maryland Univ., College Park. Inst. for the Study of Exceptional Children and Youth.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	86
GRANT	G008200398
NOTE	167p.; For the 1984 report, see ED 244 428.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Agency Cooperation; *Disabilities; Educational Finance; *Educational Trends; Elementary Secondary Education; Federal Government; *Government Role; Handicap Identification; State Programs; *State Standards; Student Placement; Teacher Certification; *Teacher Supply and Demand; *Trend Analysis

ABSTRACT

The report follows up a report published in 1984 of a study initiated 2 years earlier concerning personnel issues in special education. The second study was undertaken to determine what changes had occurred in the intervening 4 years. Interviews were held with representatives of the state educational agencies of each of the 50 states, the District of Columbia, the Bureau of Indian Affairs, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Northern Mariana Islands. Questions concerned changes in state statutes or regulations, current supply of graduates in special education, manpower supplies, changes in the number of cooperative arrangements, changes in certification procedures or licensure, changes in identification and placement, current inservice priorities, and impact of the federal government. The first chapter summarizes results by each state or other administrative unit. Individual chapters address the issues of supply and demand, the programmatic context, inservice training, and perspectives on money and mandates, and provide state-by-state as well as overall analyses. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED305818

#166

(1)

PERSONNEL TO EDUCATE THE HANDICAPPED IN AMERICA: A STATUS REPORT

Survey and Report By
MARGARET J. McLAUGHLIN
JUDY SMITH-DAVIS
PHILIP J. BURKE

INSTITUTE FOR THE STUDY OF
EXCEPTIONAL CHILDREN AND YOUTH
Department of Special Education
College of Education
University of Maryland, College Park

1986

EC 212769

BEST COPY AVAILABLE

PERSONNEL TO EDUCATE THE HANDICAPPED IN AMERICA: A STATUS REPORT

Margaret J. McLaughlin
Judy Smith-Davis
Philip J. Burke

INSTITUTE FOR THE STUDY OF
EXCEPTIONAL CHILDREN AND YOUTH
Department of Special Education
University of Maryland, College Park

1986

With Contributors from the Fifty States, American Samoa, the Bureau of Indian Affairs, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands

Acknowledgments
Carol Copple
Kathleen Spence
Barbara Stettner-Eaton
Carol Valdivieso
June Webb

This document was produced in part under grant #G008200398 from the United States Education Department. The opinions expressed herein do not necessarily reflect the position or policy of the United States Education Department, and no official endorsement of U.S.E.D. should be inferred.

Contributors

Alabama

Bill East
Assistant Coordinator
Programs for Exceptional
Children & Youth
868 State Office Building
Montgomery, AL 36130

Ann Ramsey
Coordinator

*Myra Grady
Acting State Director
for Training & Grants Unit

Alaska

Bill Mulnix
Chief of Special Education Services
Office for Exceptional Children
P.O. Box F
Juneau, AK 99811

American Samoa

Jane French
Director, Special Education Division
Department of Education
Pago Pago
American Samoa 96799

Arizona

Tommi Pierce
Education Program Specialist
Department of Education
1535 W. Jefferson
Phoenix, AZ 85007

Arkansas

Margie Wood
Arkansas Department of Education
#4 Capitol Mall
Room 105C
Little Rock, AR 72201

*Lorraine Del Buono

Bureau of Indian Affairs

Goodwin K. Cobb, III
Bureau of Indian Affairs
Office of Indian Education
Programs
Branch of Exceptional Children
Mail Code 523
1951 Constitution Ave., N.W.
Washington, DC 20245

California

Karl E. Murray
Administrator
Personnel Development Unit
State Department of Education
P.O. Box 944272
Sacramento, CA 94244-2720

Colorado

Fred Smokoski
Special Education Services Unit
200 East Colfax
Denver, CO 80203

Connecticut

Marianne Kirner
Special Education Resource
Center
275 Windsor St.
Hartford, CT 06120

Delaware

Helen Holleger
State Department of Public
Instruction
Exceptional Children/Special
Programs Division
P.O. Box 1402
Dover, DE 19903

District of Columbia

David V. Burket
Director, Department of Special Education
D.C. Public Schools
10th & H., N.W.
Washington, DC 20001

Florida

Doris Nabi
Program Administrator
Bureau of Education for Exceptional Children
Florida Department of Education
Knott Building
Tallahassee, FL 32301

Laverne Graves
Program Specialist
Personnel Preparation

Georgia

Kathy Bush
Department of Education
Special Education Programs
1962 Twin Towers East
Atlanta, GA 30334

*Deborah Love

Guam

Steve Spencer
Assistant Superintendent
Special Education
Department of Education
P10. Box DE
Agana, GM 96910

Hawaii

C. Lynn Douglas
Hawaii State Department of Education
Special Needs Board
3430 Leahi Avenue
Honolulu, HI 96815

Idaho

Jane Lambrou
270 East Bridge Street
Blackfoot, ID 83221

Illinois

Kay Robinson
Illinois State Board of Education
100 North First Street
Springfield, IL 62777

Indiana

Carol Eby
Division of Special Education
Room 229 State House
Indianapolis, IN 46204

Iowa

Dee Ann Wilson
Certification Division
Department of Public Instruction
Grimes State Office Bldg.
Des Moines, IA 50319

Joe Freilinger
Special Education Division

Kansas

Jan Beck
Personnel Development Specialist
Special Education Administration
120 East Tenth Street
Topeka, KS 66612

Harold Hodges
Education Program Specialist

Kentucky

Donna May DeSpain
Office of Education for Exceptional Children
8th Floor
Capitol Plaza Tower
Frankfort, KY 40601

Louisiana

Virginia Beridon, Director
Bureau of Planning & Program Development
Department of Education
P.O. Box 94064
Baton Rouge, LA 70804

*Karen Goodwyn

Maine

Margaret Arbuckle
Maine Department of Education & Cultural Services
Division of Special Education
Station Number 23
Augusta, ME 04333

Maryland

Lucy Hession
Staff Development Specialist
Division of Special Education
200 W. Baltimore Street
Baltimore, MD 21201

Massachusetts

Peter De Paolo
Department of Education
Commonwealth of Massachusetts
1385 Hancock
Quincy, MA 02169

Michigan

Ted Beck
Special Education Services
Michigan Department of Education
P.O. Box 30008
Lansing, MI 48909

Richard Baldwin
Special Consultant
Policy Development

Minnesota

Anita Schwartz
Program Specialist
802 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

Norene Hale
Acting Manager
Special Education Section

Mississippi

Myrtle Glatzer
Personnel Development
Special Education Specialist
State Department of Education
P.O. Box 771
Jackson, MS 39205

Missouri

Diane Golden
Missouri Department of Elementary & Secondary Education
P.O. Box 480
Jefferson City, MO 65102

Montana

Ron Lukenbill
Staff Development Specialist
Office of Public Instruction
State Capitol
Helena, MT 59620

Nebraska

Mary Ann Losh
Nebraska Department of Education
P.O. Box 94987
Lincoln, NE 68509

Nevada

Kay Genasci
Special Education Branch
400 West King Street
Carson City, NV 89710

*Frank South

New Hampshire

Robert T. Kennedy
Director of Special Education
State Department of Education
101 Pleasant Street
Concord, NH 03301

Carol Davis
CSPD Coordinator

*Cynthia Gilles

New Jersey

Eugene R. Mason
Planning Associate
Department of Education
Division of Special Education
225 West State Street
Trenton, NJ 08625

New Mexico

Wanda Roach
State Department of Education
Education Building, Rm.125
300 Don Gaspar Avenue
Santa Fe, NM 87501

New York

Steven Brown
Division of Program Development
New York State Education Department
1071 Education Building Annex
Albany, NY 12234

North Carolina

Fred Baars
Consultant, Staff Development
Division for Exceptional Children
N.C. Department of Public Instruction
Raleigh, NC 27611

North Dakota

Ida Schmitt
Developmental Disabilities Division
Department of Human Services
Judicial Wing State Capitol
Bismarck, ND 58505

*Shelby Niebergal

Northern Mariana Islands

Daniel H. Nielsen
Special Education Coordinator
Department of Education/ Commonwealth of Northern Mariana Islands
Lower Base
Saipan, CM 96950

Ohio

Pete Gross
Division of Special Education
Ohio Department of Education
933 High Street
Worthington, OH 43085

Oklahoma

Keith Haley
CSPD Coordinator
Division of Special Education
2500 North Lincoln Boulevard
Oklahoma City, OK 73105

Oregon

Robert Siewart
Oregon Department of Education
700 Pringle Parkway, S.E.
Salem, OR 97310

Pennsylvania

Lee Herron
Bureau of Special Education
Department of Education
333 Market Street
Harrisburg, PA 17108

Puerto Rico

Lucilla Torres
Special Education Programs
State Department of Education
Box 759
Hato Rey, PR 00959

Rhode Island

Diane Devine
Inservice Coordinator
Special Education
22 Hayes Street
Providence, RI 02908

Charles Harrington
Coordinator

South Carolina

Carolyn Knight
Programs for Handicapped
Department of Education
1429 Senate Street
Columbia, SC 29201

South Dakota

Tom Miller
Section for Special Education
700 N. Illinois Street
Pierre, SD 57501

Tennessee

Laura Davis
Division of Special Programs
132 Cordell Hull Building
Nashville, TN 37219

Texas

Joan Shirley
Department of Special Education
William P. Travis Building
1701 N. Congress Avenue
Austin, TX 78701-2494

Utah

Cyrus W. Preston
Specialist, CSPD & LD
State Office of Education
250 E. Fifth South
Salt Lake City, UT 84111

Vermont

Idora Tucker
Coordinator of Training
State Department of Education
State Office Building
Montpelier, VT 05602

Virgin Islands

Priscilla Stridiron
Acting Director for Special Education
Office of Special Education
P.O. Box 6640
Virgin Islands Department of Education
St. Thomas, VI 00801

Virginia

Sara Irby
Personnel & Professional Development
P.O. Box 6Q
Richmond, VA 23216

Les Jones
Associate Director
Programs for the Handicapped

Washington

Lois Hart
Coordinator, Special Services
Inservice Training
Office of Superintendent of Public Instruction
Old Capitol Building, FG-11
Olympia, WA 98504

West Virginia

Robert Gabrys
Director, General & Professional Education
State Department of Education
Building 6, Room B-337
Charleston, WV 25305

Wisconsin

Tom Stockton
Division for Handicapped Children & Pupil Services
P.O. Box 7841
Madison, WI 53707

Wyoming

Carol Nantkes
Curriculum Consultant for Special Programs
Wyoming Department of Education
Hathaway Building
Cheyenne, WY 82002

*Individuals who contributed to follow-up interview but are no longer in the listed position.

Typesetting: Thrift Acu-Type
Production: Ruth Burke

CONTENTS

Chapter		Page
1.	INTRODUCTION	1
	Abbreviations	4
	The Context For the Study	5
	Certification	7
	Cross-Categorical Certification	23
	Summary	25
	References	25
2.	SUPPLY AND DEMAND	27
	Dimensions of Supply and Demand: Current Status	28
	Preservice Programs	28
	The Supply of New Graduates	31
	Pupil Enrollments and Preservice Enrollments	33
	Manpower Shortages and Surpluses	35
	Personnel Surpluses	37
	Factors Contributing to Manpower Supplies	39
	Quality of Personnel	39
	Less-Than-Full Certification	44
	Reductions in Force	47
	Individual Profiles	48
3.	THE PROGRAMMATIC CONTEXT	73
	Student/Teacher Ratios	73
	Cooperative Arrangements and Interagency Agreements	77
	Interagency Cooperation	77
	Contracting for Services	79
	Deinstitutionalization and Out-of-District Placements	80
	Definitions and Eligibility	82
	Changes in Definitions, Eligibility Criteria Criteria, and Service Categories	82
	Multicategorical Programming	86
	Program Features	90
	Early Childhood Special Education	90
	Secondary and Postsecondary Programming	91
	Secondary Exit Criteria	94
	Selected Program Initiatives	95

Chapter		Page
	Least Restrictive Environment and Placement in Regular Education	100
	Directions in Regular Education Placement	101
	Rural and Remote Programs	105
	Rural and Remote Personnel Shortages	106
	Salaries in Rural and Remote Areas	108
	Low-Incidence Handicaps in Rural and Remote Areas	109
	Class Loads and Grouping for Instruction in Rural and Remote Areas	110
	Teacher Preparation for Rural and Remote Areas	111
	National Agendas for Rural and Remote Areas	114
	Prevailing Programmatic Needs	114
	References	118
4.	INSERVICE TRAINING	119
	Inservice Priorities	119
	Topical Content	120
	Inservice Participants	125
	Retooling	129
	Retraining Due to Policy Changes	130
	Inservice for New Personnel	132
	Inservice Funding	133
	Summary	136
	References	137
5.	PERSPECTIVES ON MONEY AND MANDATES	138
	Summary	138
	Conclusions	144
	Certification	145
	Supply and Demand	146
	Factors Contributing to Manpower Supplies	147
	The Programmatic Context	150
	Other Program Initiatives	152
	Inservice Training	153

LIST OF TABLES

	Page
Table 1. Certification Specialty Areas	8
Table 2. Preservice Programs Missing	29
Table 3. Personnel Shortages	36
Table 4. Personnel Surpluses	38
Table 5. Mechanisms for Requesting Exceptions to Student/Teacher Ratios	74
Table 6. Inservice Priorities: Topical Content	122
Table 7. Inservice Priorities: Target Participants	126

The information in this volume is based on interviews conducted in 1984. All information was reviewed and updated by interviewees to ensure that it reflects conditions as of January, 1986.

Chapter 1

INTRODUCTION

In 1982 the authors of this report undertook a national survey of representatives of state educational agencies concerning personnel issues in special education. That survey was unique in that it focused not only on basic manpower issues — supply and demand — but also went beyond the conventional approach of counting bodies and projecting attrition rates and supply. The 1982 study, which involved interviews with representatives of each of the 50 states, the District of Columbia, the Bureau of Indian Affairs, Puerto Rico and Guam, examined programmatic issues related to manpower levels. The interviews were structured around eight areas that included questions concerning certification, preservice programs, manpower supplies, movements or trends in identification and placement, and inservice priorities and support. Within each of these areas, the interviews were open-ended and the state representatives were encouraged to discuss any other issues concerning personnel.

The results of that first survey, as reported in *Personnel to Educate the Handicapped in America: Supply and Demand from a Programmatic Viewpoint* (Smith-Davis, Burke, & Noel, 1984), revealed that, indeed, the issues of manpower supply are far deeper than mere projections and estimates can portray. The effects of an inadequate supply of well-trained personnel on the level and quality of services that public schools can provide for handicapped students were dramatically evident in the interviews. In fact, concerns over personnel were second only to concerns regarding constrained budgets as school districts moved to meet the intents of P.L. 94-142.

At the time of the first interviews, states were facing difficult fiscal and political conditions. In 1982, the possibility of block grants and budget recisions and the threat of deregulation of the Education for All Handicapped Children Act were a source of anxiety, and special educators in the states were uncertain about the future their programs would have. As indicated in that first report, all but 14 of the 54 jurisdictions included in the study had budget deficits. In almost all jurisdictions, austerity measures were resulting in with-

drawal of support from education. The period of almost unrestrained growth of special education was ending, and the future was uncertain.

During the four years since the first study was conducted, changes have occurred in some states. The overall fiscal situation has eased in some areas with some reductions in unemployment. More state budgets have been balanced, and there appears to be a decrease in tax protests. At the same time, the effects of the consolidation of some federal grant programs and a general no-growth phase in federal education spending have had an impact on states.

One notable change has been the increased national concern regarding the quality of education, including the quality of teachers. This concern has been voiced by major government and private commissions, task forces and professional organizations. With these considerations in mind, the authors decided to follow up on the original study to determine what changes, if any, have occurred with manpower and programs in special education.

Thus, during the 1984–85 school year a second series of interviews was initiated by the two senior authors of this volume. As in the first set of interviews, questions were organized around eight topical areas or sequences but were open-ended in order to encourage discussion of other relevant issues. Included in this follow-up were representatives of the state educational agency (SEA) or equivalent from each of the 50 states, the District of Columbia, the Bureau of Indian Affairs, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Northern Mariana Islands. Since the last three jurisdictions were not represented in the first study, the interview questions included current status as well as change since 1982. The question areas, paralleling those of the first interview, probed the following areas:

Sequence 1. Has there been any change in state statute or regulations governing student/teacher ratios since you were interviewed in 1982? Are there any pending changes regarding class or case loads, such as new rationales or studies? Are current class/case loads increasing or decreasing? To what do you attribute these changes — personnel shortages, economic constraints, policy decisions, etc.?

Sequence 2. What is the current supply of new graduates in special education in your state? Has supply gone up or down

since 1982? Are there any changes in the types of preservice programs present or absent in your state? What concerns do you have about the skills of new personnel entering the profession?

Sequence 3. What are the manpower supplies in your state? What factors account for any changes? Have reductions in force increased or decreased? Has the child count increased or decreased since 1982? How are local districts dealing with shortages in recruiting or staffing?

Sequence 4. Have any changes occurred in the number of cooperative arrangements among districts or agencies contracting for services, deinstitutionalization, mainstreaming or other placements? What new programs have been initiated in your state? What programs have been lost?

Sequence 5. Have there been any changes in certification procedures or licensure since 1982? Have there been any changes in the policies regarding provisional certification? Has there been any change in the number of personnel currently employed in special education who are less than fully certified?

Sequence 6. What changes have you noted in the identification and placement of handicapped students since 1982? Are there any changes in the use of multicategorical groupings or other administrative arrangements? How do these relate to the personnel situation? Do you have new teachers? Is the placement due to personnel shortages?

Sequence 7. What are your current inservice priorities? How have these changed since 1982? Is your current inservice primarily retooling, or is it focused on increasing skills and innovative programming? What is the status of your funding for inservice efforts? Has there been any new legislation concerning professional development, either inservice or preservice? Is your state in a stronger or weaker position regarding personnel improvement than it was in 1982?

Sequence 8. What has been the impact of the federal government on education of the handicapped in your state since 1982? What are most pressing needs in your state today regarding education of the handicapped? If you had the opportunity, what advice would you give to your governor and the U.S. Congress?

Contributors were selected on the basis of their involvement with manpower and training within their respective agencies. Initial contact was made with the individuals who were interviewed in 1982 (or, if someone was no longer with the agency, with the person in the same position). When the purpose of the interviews and the question areas were explained, the individual sometimes requested that additional jurisdictional representatives be interviewed. These requests were most common in the area of certification and in instances where the specifics of new programs needed to be explained.

Arrangements for telephone interviews were then made with all individuals. Some interviews were conducted through conference calls; in other instances, two or more persons from each state were individually interviewed. Interview notes were then prepared for each jurisdiction, and responses were categorized and consolidated by category. When necessary, follow-up telephone calls were made to clarify information and to obtain additional information on issues not covered in the first interview.

In early 1986, a draft of the report was sent to all contributors for their review and revision. At that time, contributors could change or update information. Therefore, while most of the information in this report was originally provided in 1984, it was reviewed and updated as of January, 1986 in order that it accurately reflect current conditions.

Abbreviations

Because there is no uniform terminology across handicapping conditions or personnel category, the descriptors used in this report may not match the terms employed in all the states. In most instances, the descriptor selected is the more common term. However, since the abbreviations may not be easily recognizable, we have included a list of abbreviations appearing in the text of the report. A list of the abbreviations used in particular tables will be given with the table.

Abbreviations Used in Text

BD	Behaviorally disordered
COHI	Crippled and other health impairments
LD	Learning disabled

MR	Mentally retarded
EMR	Educable mentally retarded
TMR	Trainable mentally retarded
OT	Occupational therapist
PT	Physical therapist
SED	Severely emotionally disturbed
SH	Severely handicapped

The Context for the Study

To understand the current status of manpower in special education, it is necessary to consider the broader political and economic factors surrounding education and special education. As noted earlier, since the first interviews were conducted in 1982, economic changes have occurred in some states. For over half of the states, the financial situation for education remained about the same, but several noted that the increased attention to educational reform and the accompanying legislation could result in additional school revenues once legislators vote on appropriations. Six states (Alabama, California, Colorado, Delaware, North Dakota and Wisconsin) reported that their states were in better fiscal condition than they were four years ago, with some increases in the education budgets. The farm states reported concerns over dwindling tax bases, and at least one Midwest industrial state, Ohio, still faced high unemployment. Oregon reported pending legislation that would cap property taxes and result in a reduction of local school budgets by about 40 percent. No state reported major increases in funding for special education except those resulting from increases in the numbers of handicapped children identified. Thus, while the national theme was not crisis, it was cautious realism.

Looking specifically at education, perhaps the most notable recent trend has been the heightened concern for quality in education. Public attention was focused by reports citing overall low scholastic ability of education majors (Kirst, 1985; Schlechty and Vance, 1983) and general low public esteem for the education profession (Darling-Hammond, 1984; Feistritzer, 1983; Kirst, 1985). The concerns regarding personnel were viewed as contributing factors to an overall decrease in the quality of education in our schools.

Public concern resulted in educational reform initiatives that addressed all levels of the educational system. During 1983 and 1984, more than 700 pieces of legislation were passed by states seeking to improve, directly or indirectly, the quality and substance of public education in the United States (Kaplan, 1985). Much of the school reform legislation attempts to strengthen quality control of teachers and create higher standards for schools. In some instances, the legislation has resulted in increased budgets for education.

While special education has been included in the broader school reforms, there are additional issues specific to special education. While the threat of deregulation and budget recisions began to abate, at least two major new initiatives emerged. The first involved the focus on transition from school to work and a major initiative to establish programs that foster movement of the handicapped into employment and the community. A second area of both state and federal concern emerged with respect to the identification of specific learning disabled students. Propelled by the fact that the learning disabled students were accounting for nearly 40 percent of all handicapped children (Fraas, 1984), special education once again began to address the issue of who should be served as learning disabled and focused on the need for program alternatives within regular education to serve low achievers.

With respect to personnel, enrollment continued to drop in Colleges of Education from 1982 to 1986. In addition, concern over teacher quality prompted some major reorganizations of teacher training units within institutions of higher education (IHEs). Within special education, the federal priorities shifted in 1981 from an emphasis on inservice teacher education to stronger support for preservice education. In fact, at the time of the most recent interviews, the federal government was proposing to withdraw priorities for new grants for SEAs and for leadership training.

During the years that have elapsed between the original report and this follow-up, the numbers of handicapped children aged 3–21 served under P.L. 94-142 and P.L. 89-313 increased from 4,233,282 (data for 1982–83 school year) to 4,363,031 (1984–85 data), an increase of approximately three percent (U.S. Department of Education, 1984; 1986).

Thus, while the follow-up was not conducted in the context of severe fiscal crisis, as was the 1982–83 report, it was

carried out at a time of intense concern with the quality of education and teachers in America's public schools. In addition, there were pressures on special education to define more clearly the students it should serve, as well as to extend its services to facilitate the movement of handicapped students into productive adult lives.

Certification

State certification practices are an important aspect of the contextual background for understanding manpower supply and demand issues. In part, they crystallize the state's orientation to service delivery, as well as provide some indications of the emphasis on quality control of personnel. Between 1982 and 1986, certification was one of the most volatile areas of change in the states. Of the 57 jurisdictions represented, 37 (65 percent) have made some changes to their policies governing special education certification or have such changes pending before their Boards of Education or legislature.

The changes ranged from creation of new specialty or endorsement areas to massive changes in requirements, including such features as increased educational preparation, teacher tests, periods of provisional certification for new teachers, and peer evaluations. In many instances, the changes came as part of a larger school reform package, but in some jurisdictions the changes were limited to special education. These changes reflected either the addition of a new type of program (such as for the autistic or multicategorical grouping) or an alignment of certification with ongoing service delivery options, such as generic or cross-categorical grouping of students.

Table 1 provides an overview of certification practices by jurisdictions.* As the table indicates, in 1986 a slight majority of jurisdictions had categorical certification. Taking into account the addition of three new jurisdictions for this study, there has been little change in the proportion of categorical versus generic certification since the last survey was conducted. It should be noted that the distinction between categorical and generic certification is not a sharp one. States with primarily noncategorical certification can and usually do

*The Key for abbreviations in Table 1 is provided following the table.

Table 1. Certification Specialty Areas*

	Cat	Gen	ED/BD	LD	EH	MR	PH	DB	HI	VI	SH/DD	OH	Aut	Speech	EC	Elem	Sec	Res /Cons	Counsl	PE	G/T	Transp
Alabama	X		X	X	X	X																
Alaska		X	X	X		X	X		X	X	X							X				X
Arizona	X																					X
Arkansas		X	X						X	X	X			X								X
California	X									X										X		X
Colorado	X																					X
Connecticut		X						X	X	X				X								
Delaware	X		X	X		X	X		X	X			X	X	X						X	X
Florida	X																					X
Georgia	X		X	X	X	X	X	X	X	X				X								
Hawaii		X							X	X												X
Idaho		X	X				X		X	X	X											
Illinois	X																					X
Indiana	X		X	X	X	X			X		X			X	X				X	X	X	X
Iowa	X		X	X		X	X		X	X	X			X	X	X	X		X			X
Kansas	X																					X
Kentucky		X	X	X	X				X	X	X	X		X								X
Louisiana		X			X				X	X	X			X	X						X	X
Maine	X		X	X		X			X	X				X							X	
Maryland		X							X	X	X				X	X	X					X
Massachusetts		X			X				X	X	X			X	X				X			X
Michigan	X		X	X	X	X	X		X	X		X	X	X	X	X	X					X
Minnesota	X														X							
Mississippi	X																	X				X
Missouri	X		X	X		X			X	X	X	X		X	X							X
Montana		X		X							X											X
Nebraska		X	X	X					X	X	X			X	X	X	X					X
Nevada	X			X		X								X	X	X		X				X
New Hampshire	X																		X			X
New Jersey		X							X	X												X
New Mexico	X																	X			X	X
New York		X																				X
North Carolina	X		X	X		X			X	X	X			X				X			X	X
North Dakota	X													X	X							X
Ohio	X				X	X	X		X	X	X	X		X		X	X			X		X
Oklahoma	X																					X
Oregon	X					X		X	X		X		X									X
Pennsylvania	X		X	X	X	X	X	X	X	X	X	X	X	X	X							X
Rhode Island		X					X	X	X	X				X			X	X	X	X		X
South Carolina	X																					X
South Dakota		X									X			X								X
Tennessee		X							X	X				X								X
Texas		X								X	X		X									X
Utah		X	X	X		X			X	X				X				X				X
Vermont		X									X			X				X	X			X
Virginia	X			X		X								X								
Washington		X			X						X				X							X
West Virginia	X		X	X		X	X		X	X	X		X	X	X					X	X	X
Wisconsin	X		X	X		X	X		X	X	X			X	X	X	X			X		X
Wyoming		X																				X
Guam		X																				X
Puerto Rico	X																					X
BIA	VARIES ACCORDING TO STATE																					
Dist. of Columbia		X							X	X				X								X
N. Marianas		X																				X
American Samoa		X																				X
Virgin Islands		X												X								
TOTAL	30	26	18	19	10	18	11	5	28	28	22	5	6	28	16	7	7	8	6	6	7	48

*The Key for abbreviations in this table is provided below.

Table 1. Key: Certification Specialty Areas

Cat	Categorical
Gen	Generic
ED/BD	Emotionally disturbed/behaviorally disordered
LD	Learning disabled
EH	Emotionally handicapped
MR	Mentally retarded
PH	Physically handicapped
D/B	Deaf/blind
HI	Hearing impaired/deaf
VI	Visually impaired/blind
SH/DD	Severely handicapped/developmentally disabled
OH	Orthopedically handicapped
Aut	Autism
Sp	Speech
EC	Early Childhood
Elem	Elementary
Sec	Secondary
Res (Gen)	Resource room teacher (generic)
Consult	Consulting teacher/specialist
PE	Physical Education
G/T	Gifted and talented
Temp	Temporary

---

have specialty endorsement areas for certain types of handicaps or certain types of personnel, and states with categorical certification may include one or more categories for generic specialists or perhaps cross-categorical specialists (e.g., teacher of learning handicapped or resource room teacher). In addition, related services personnel (speech and language therapists and occupational and physical therapists) are generally certified outside of special education.

One area of change in the related services area that was reported to be affecting the personnel situation was the adoption by the American Speech and Hearing Association (ASHA) of new licensing requirements. The new requirements require training at the graduate level and have resulted in some public school speech and language personnel no longer being eligible for licensure. This development underscores the theme of interrelationships between issues of *quality* of services and *quantity* of personnel in education.

Because of the prevalence and diversity of the certification changes, it is useful to summarize changes on a state-by-state basis.

Alabama

The Board of Education established a new category for mild Learning Handicaps (LH). The certification requires Master's level training and gives the individual eligibility to teach mentally retarded (mild to moderate), learning disabled, or emotionally conflicted students, although the students cannot be commingled. In order to be admitted to the LH training program, students must have a degree in at least one of the three disability areas. There is a new competency-based college exit test for teachers.

Alaska

There have been no changes in special education certification. Alaska still has generic certification with endorsements. No teacher tests are required.

American Samoa

Postsecondary training is offered in American Samoa beginning with an Associate degree program offered by the American Samoa Community College. Students can go on to earn a bachelor's degree through the University of Hawaii or Western Oregon University. To qualify for these programs, applicants must pass an English proficiency exam. The only teacher training program offered by the universities is elementary education, so special education teachers who went to college on the island majored in elementary education. More recently, junior and senior level courses in special education have been offered on the island for those seeking an additional concentration in special education.

Anyone with a bachelor's degree, regardless of the major, is eligible to teach. A teaching certificate may be issued to an individual with a bachelor's degree and one year of teaching experience. Professional teaching certification is issued to those with a Master's or bachelor's degree and five years experience. Of the 45 special education teachers in American Samoa, a third hold a bachelor's degree and are either taking senior-level courses in special education offered on the island by the University of Hawaii or are enrolled in the Master's

special education program through the University of Hawaii and the Western Oregon University. The remaining two thirds of the teachers have training at the Associate degree level and are receiving inservice training and supervised teaching experience.

The special education courses and Master's program offered by the University of Hawaii and Western Oregon University, as well as the inservice training programs, are dependent upon funds available through Personnel Preparation monies offered by the U.S. Office of Special Education Programs.

Arizona

Draft recommendations have been sent to the School Board to revamp certification. Generic certification is proposed, with skills tests required for separate endorsements by disability areas and by elementary and secondary levels.

Arkansas

Minimum standards for public schools have been adopted. These include minimum competency testing for teachers. Special education now has generic certification, that is, certification specified for teaching students with mild, moderate or severe retardation. This system corresponds to a trend among districts to move from categorical to non-categorical placements. There is a new SH certification that is more specific; however, the teachers with the old MR certification retain eligibilty by a "grandfather clause" provision.

Bureau of Indian Affairs

There have been no changes in certification policy.

California

A credential is once again required in the area of visually handicapped to improve service in this area. There is also a new certificate in adaptive physical education. Changes are being explored for the bilingual special education and infant/preschool areas, as well as for uncertified personnel working in developmental centers.

Colorado

The state has adopted a new model for certification, which is based on student needs. Categorical certification has

been eliminated. The new system divides certification into moderate and severe needs. Holders of certificates issued prior to the adoption of the new model are not jeopardized.

Connecticut

The Certification Advisory Council has proposed changes, including: (1) a restructuring of the present two-tier system to a three-tier system; and (2) a differentiation of certification by grade levels.

Delaware

A certification for teachers of autistic children was added to the present categorical certification.

District of Columbia

There have been no changes in special education certification; proposed changes are being reviewed by the Board of Education.

Florida

There is currently some pressure to look toward generic certification with fewer endorsement areas. Currently, there is categorical certification in 11 areas, including "Varying Exceptionalities." A teacher competency exam and a one-year internship are required for certification, but these were in effect prior to 1982.

Georgia

Certification in the hearing impaired area is being dropped, and the state is reviewing changes in the interrelated certification.

Guam

Certification standards for special education are in the process of being changed. Currently, special educators are required to meet the elementary or secondary certification requirements plus additional special education requirements. People with regular degrees in special education from off-island programs often do not meet requirements, so reciprocity arrangements are being explored. A new continuing education requirement has been added for all personnel. To be recertified, teachers must take six semester hours over a three-year period.

Hawaii

Recent changes have been made in the present K-12 special education generic certification. Specific requirements have been adopted for early childhood special education certification and emphasis is given in hiring to mild/moderate and severe/profound areas of training. A proposed six-year special education plan for 1986-1992 calls for changes in certification to reflect needs in level of severity, specialization (i.e., Consultant Teacher), age levels from birth to adulthood and renewable certification.

Idaho

The State Board has adopted a two-part requirement: 1) All certified educational personnel must take six credit hours every five years for renewal of their certificate; and 2) all districts must develop and implement a district-wide professional development plan to be filed with the SEA. The latter requirement is important because three of the required six credit hours may be obtained from the local district inservices. In cooperation with Idaho's institutions of higher education, the SEA is in the process of developing innovative new preservice and inservice models to assist training efforts.

Illinois

There have been no changes in state statute. There is a major push to examine current policy with respect to noncategorical programs. There is a mismatch between what districts want — LD/BD training — and how IHE training programs are organized. Universities are concerned about the present K-12 certification requirement of fulfilling two practicum experiences. Training programs are also concerned about the feasibility of training cross-categorical personnel in only four years.

Indiana

There is a new certification for MR that covers all levels of severity; it replaces an EMR certification. There are two new certifications for school psychologists, one at the Master's level and one at the doctoral level. Psychologists at both levels can evaluate emotional handicaps. The state no longer requires a Master's degree for certification as a

teacher; it now requires certification renewal units. New graduates or other teachers without a Master's degree or a lifetime license to teach will now need 180 renewal credits every five years. Some school boards are considering stringent criteria on what is applicable for renewal credits (45 renewal credits are equivalent to three semester hours, and teachers will obtain 20 renewal credits for supervising student teachers).

Iowa

A recent bill passed by the legislature but vetoed by the Governor would have removed the responsibility for certification of instructional personnel from the Department of Public Instruction and given it to a separate board. This action was initiated in response to the large numbers of temporary certificates and the perceived laxness in certification standards. The state has endorsement for SH teachers and for teachers of the preschool handicapped. The state has also eliminated the practice of permitting special education teachers with letters of authorization to perform certain roles, such as teaching in multihandicapped classrooms, working as consultants or work experience instructors, supervising or serving as educational strategists. Now these specialties are reflected on certificates and teachers will be requried to have the actual certificate in order to fill a given role. All speech teachers and audiologists must now be licensed by the Board of Health requiring the clinical training. Any person who is authorized but not licensed will have to get a new certificate and have the required training.

Kansas

There is now competency-based certification that is tied to program approval. Reciprocity with other states is also being explored. There is a move toward precertification testing and a first-year internship. Provisional certification will be phased out by July 1, 1989.

Kentucky

Effective January 1, 1985, Kentucky certification requires an examination as well as a one-year internship overseen by a review committee before provisional certification is granted. Certification may be renewed for five-year periods

upon completion of three years of successful teaching experience or earned credit hours.

Louisiana

Starting in 1984, currently certified regular educators can get special education certification by taking a set of required courses. At present, these regular educators have to take all the courses required in the special education major. There has also been a change in the mild-moderate certification that converted nine hours from professional coursework to electives so that a student can take extra hours in areas outside of education. The IHEs saw the old certification as being too restrictive and creating problems in recruitment of students. Changes have been made in certification for teaching the severely handicapped.

Maine

New teaching credentials have been approved by the State Board of Education in two categories: the hearing and the visually handicapped. The State Board of Education and the State Board of Examiners of Psychologists are reviewing a joint process for certifying school psychologists.

Maryland

There have been no changes since 1982. As of 1981, all regular educators are required to have three credit hours in special education for certification renewal.

Massachusetts

Beginning in 1982, certification has been basically generic by severity level and age, with special certification for vision, audition, and speech and language. Teacher testing is being discussed, but it is not likely to be instituted soon.

Michigan

A new endorsement category for autism was adopted in 1983.

Minnesota

There is a new early childhood special education certification, and provisional certification has been eliminated. Licensing of social workers and certification of special education directors are also being examined.

Mississippi

An Educational Reform Act, drafted in 1982, is now being implemented. Certification begins with a provisional period. These provisional teachers will be evaluated during the provisional period of three years and recommendations made for permanent certification. Teachers will be required to complete a certain number of inservice hours per year to keep their certification current.

Missouri

There are new certification requirements that go into effect in 1986. Certification will remain categorical, but certification for the areas of the deaf/hearing impaired, visually impaired, speech/language impaired, and severely handicapped/developmentally disabled will require additional specified coursework.

Montana

A new certification requirement for psychologists specifies that any psychologist, clinical or other, providing services in the schools or through contract, must be certified as a school psychologist.

Nebraska

There is a new education law that includes sections on certification. These include an entry-level assistance program, continuing education units, and a career-ladder approach to certification. In special education, there is now a mild/moderate endorsement, which replaces EMR/TMR. Nebraska has a generic bachelor's level certificate, with specialty endorsements at the Master's level.

Nevada

Endorsements within special education are increasing requirements and practicum experience. There is new certification in early childhood, as well as a new generalist certificate for teachers serving resource rooms and multicategorical settings.

New Hampshire

There is new certification for consultant teachers in special education, and a push for early childhood certification. The State Board has implemented a preprofessional skills testing program which requires all new people entering the

teaching field to attain acceptable levels on a reading, math and writing exam.

New Hampshire has two alternative certification processes. Emergency certification is granted by the State Board when an individual has been offered a teaching position in a local district. This individual is limited to teaching one year in that district only. The other route enables an individual to obtain a teaching certificate by having a panel of experts review his or her educational and professional experiences. If the panel considered that the individual has attained the required teaching competencies, a full teaching certificate will be granted allowing the person to teach anywhere in the state.

New Jersey

At present, there has been no change in certification. However, the State Board has recently approved a process by which candidates with no background in special education or education can receive a contract, do a one-year teaching internship, go through an evaluation process that includes a state examination and receive permanent certification. Under this system, individuals could become special education teachers by following an alternative route to certification.

New Mexico

Major changes in all categories of certification for teaching the handicapped will be made prior to the 1986-87 school year. Inquiries may be directed to the Teacher Education & Certification Division of the SEA after July 1, 1986.

New York

There have been no changes in special education certification. There is currently a blanket certificate that covers most handicaps K-12, but separate certification for elementary and secondary levels is being investigated. In 1984, the Board of Regents launched an Action Plan to Improve Elementary and Secondary Education. This plan, which refers to education of the handicapped and cites the need for regular educators to have skills in working with the handicapped, may lead to certification changes.

North Carolina

There is new certification for Exceptional Child program administrators. An early childhood special education cer-

tification is being planned. The North Carolina Career Development Plan has five levels of differentiated professional roles. Teachers will be evaluated three times during each of the two years of initial certification, receive annual performance evaluations for the two years of provisional certification, and then move to career status 1-111 pending successful completion of annual reviews by the state-mandated Performance Appraisal System. Teachers must complete two successful years in order to move up each level.

North Dakota

There is now special education certification for bachelor's level speech and language graduates. The new credential for the preschool handicapped area certifies the individual for working only in handicapped early childhood classrooms.

Northern Marianas

All teachers must earn a bachelor's degree according to a reasonable time line (full-time summer study) agreed upon between the teacher and Superintendent of Education. At present, there is a specialization in special education requiring 21 units above the AA degree.

Ohio

The State Board is in the initial stage of developing new certification standards. The options that appear to be favored include use of a Master Teacher and a "fifth year" or internship. In addition, there is a move to push for students in regular education to be exposed to special education at both the preservice and inservice levels. There is a new general education administrator's certificate. In special education, there is a need for new certification in the area of severely behaviorally handicapped; current certification is LD/BD.

Oklahoma

There have been no changes in special education certification. The state established teacher testing in 1982, and there is an entry-year program that involves teacher evaluation by a committee three times during the first year before certification. Teachers who are not approved in the first year can hold no more than two one-year internships.

Oregon

There are new certificates in these areas: severe MR; deaf and hearing impaired; and a category called "severely impaired," which includes orthopedic handicaps, autistic, blind and deaf-blind.

Pennsylvania

A new statute is guiding the preparation of teachers and administrators. As of 1987, to get initial certification, a teacher must complete an approved program and pass a state test in basic skills, general knowledge, and professional knowledge in a specialty area (including special education). The first year is an induction year; a mentor will be assigned, and teachers will be evaluated. A teacher can apply for a lifetime certificate after three years of successful teaching and completion of 24 credit hours. This certification will be good for six years. To keep a lifetime certificate, a teacher will need to complete six credits every five years. In special education, there is a move to look at certification for the mentally and physically handicapped, which now includes LD, MR, COHI, and SED. There is dissatisfaction with the ability of teachers with this certification to work with SED students. A bilingual certificate in special education is also under consideration.

Puerto Rico

There have been no changes. There is a new certification for four areas: communication disorders, visual handicaps, mild and severe handicapping conditions.

Rhode Island

There have been some minor changes in policies. The state now requires that regular educators have a course in special education focusing on the exceptional child. There have been no changes in the special education certification policies.

South Carolina

There have been no changes; special education certification is still categorical. A proposal to establish multicategorical programs did not pass at the legislative level.

South Dakota

There have been no changes in special education certification.

Tennessee

In 1982, the state certification agency moved to reduce the numbers of endorsements for teachers. In special education, five endorsements were combined into a special education endorsement. At present, this special education endorsement, along with endorsements in impairment of hearing, speech, and vision, are the only four certification areas for the handicapped. The special education endorsement includes the gifted and talented and extends to all levels of severity and age. Endorsements for preschool handicapped and gifted are being developed.

Texas

The undergraduate teaching certificate has been completely redone, and a proposal for revamping the graduate certification is now pending. In special education, there are now four certificates: Elementary Generic, which is the basic special education certificate; Secondary Generic for the science teacher who takes special education courses; speech; and auditory handicaps. There are three endorsement areas on top of the certificates: visually handicapped, severely emotionally disturbed and autistic, and severely/profoundly handicapped. At present, the assignment criteria for special education are structured to provide maximum flexibility to the local district frequently facing a shortage of qualified candidates. The early childhood special education endorsement was removed. The proposal for a bilingual special education certificate was not successful.

Utah

There is a new resource credential designed for teachers in multicategorical programs. Consideration is being given to changes in some credentials; a secondary credential is also being explored.

Vermont

The state has moved to a competency-based model. The training programs are now all competency-based also. The

certification process now involves: 1) paper review of candidates' records of coursework and documented experience; and 2) on-site review of candidates that includes interviews, observation, and work samples. The latter evaluation is being performed by an independent agency under contract with the state and is only done if the teacher has not taken the necessary coursework. Provisional certification can be granted if a district demonstrates a good faith effort to find a teacher with the necessary credentials. Most provisional certificates are given to individuals in a graduate program who are not yet finished, and the State Board must approve the requests.

Virginia

In 1985, a Beginning Teacher Assistance Program was initiated. After completing an approved program and passing the National Teacher's Examination, a teacher receives a provisional certificate. The teacher then goes through a two-year probation period, which may involve, at LEA discretion, assignment of a mentor, interviews, observation, and evaluation of work samples. Observation instruments have already been developed. The standards are focused on beginning teacher competency levels, which translate to "safe conduct in the classroom." Certification is currently competency-based and will continue to be so.

Virgin Islands

There have been no changes in special education certifcation. There is generic certification with special requirements for speech/language, occupational therapy, and physical therapy. A Master's degree is required for permanent certification.

Washington

The State Board is conducting hearings to consider new certification standards. The proposed standards would include new certification for birth to three years and endorsements in special education for the continuing or lifetime certificate. Currently special education teachers are required to have a minimum of 25 hours above the basic credential, but there is no certificate for this. Proposed requirements would restrict teachers to teaching only in their endorsement areas.

West Virginia

The state was scheduled to begin teacher testing, including content specialization tests for each area within special education. Teachers will have to pass the Educational Testing Service preprofessional skills test. In addition, there is a performance assessment that must be signed by the public school and college supervisor. Special education certification will remain categorical, but West Virginia has differentiated severe retardation from mild to moderate retardation and changed current grade-level certification to developmental levels, e.g., early childhood (K-4), middle (5-8), adolescent (9-12). Teachers would have to pass a performance assessment in each area of endorsement and at each grade level. There is also a new endorsement for behavior disorders, which include autism. A new provision allows teachers to build seniority in any area of certification; thus, teachers can carry seniority from special education to regular education if they choose to switch.

Wisconsin

There is a new severely handicapped certification, with a grandfather clause, which will take effect in 1986 and new licensing for mobility instructors. There is also new flexibility for people who seek additional endorsements, such as LD. Formerly, a MR teacher who wanted LD endorsement had to take all required courses and a practicum. Now there is basic required coursework that parallels the regular education requirements; the responsiblity for determining a suitable practicum rests with the teacher training programs.

Wyoming

There has been no change in certification policies. The state has added a new certification for educational directors, including special education directors; a new certification for educational diagnosticians is pending.

As these summaries of certification policies indicate, jurisdictions have been very active during the past several years in the area of licensing of new teachers. In most instances, changes have come about as part of a larger state effort to improve the quality of teachers; they signal a move on the part of states to exert more control over entry into the profession. (This broadening of the concept of

teacher training will be discussed in greater detail in Chapter 2.) It is clear that the use of tests and probationary or provisional certification is becoming more prevalent among states and is being extended to specific content areas within handicapped education.

While special educators are included in the new performance standards, the changes specific to education of the handicapped appear to increase flexibility in placement of teachers or students. This tendency is reflected in the number of jurisdictions that moved from categorical certification to more generic licensing and to the creation of new endorsements for positions such as resource teachers or teachers of the learning handicapped. At the same time, there appears to be a trend toward creating separate endorsements or increasing requirements for teachers of the severely handicapped, including the autistic. Although some jurisdictions moved toward greater recognition of developmental levels or age and grade categories in their certification practices, particularly for early childhood, the major trend still appears to be towards certifying special education teachers from grades K-12.

Cross-Categorical Certification

Perhaps the one issue related to certification that prompted the most concern and discussion was the licensing of special education teachers to work with more than one type of handicap. The concerns centered around the adequacy of training provided to these personnel and their lack of skill in dealing with the full range of learning and behavioral handicaps presented by the children they must serve. Often, certification changes have followed district practices of cross-categorical grouping.

In several jurisdictions that have recently initiated such cross-categorical certification, the policy is already being reconsidered due to feedback from local districts. The pressure for the change is also attributed to local districts, most often rural, that request increased flexibility in deploying teachers, as well as less restrictive requirements for certification in order to facilitate recruitment. Respondent comments regarding cross-categorical certification included:

"Administrators feel that they have to supplement training . . . not everyone is trained to work with all types

of handicaps in a class. Graduates really don't have a good knowledge of the range of handicaps they have to work with."

"We now have multicategorical resource rooms . . . we're not at all sure how this is going; it's being reconsidered."

"We established a new type of teacher for the mildly handicapped, and we've heard mixed reactions about this new type of teacher . . . we'll see."

"The special education generalists are unprepared, and exorbitant demands are often placed on them in terms of case loads and preparation."

"The general certification covers autism, but many people feel that these teachers are not qualified to teach those types of students. Also, the LD people really don't have the right skills."

"A person with four years of training can teach four types of handicaps, and there is dissatisfaction about this. There is a particular concern with teachers of emotionally disturbed students and students at the secondary level that adequacy of teacher qualification is most problematic."

"Our endorsement is in one area, regardless of how a student may have specialized, so they can be put in whatever positions are open or needed. Many students are afraid of this because they may train in the area of the mildly handicapped and have to teach severely handicapped. The preparation such teachers have received is not adequate, yet these kinds of assignments occur under a noncategorical endorsement system."

"Anyone with a special education certificate is allowed to teach any type of special education. The new standards support this approach, and the blurring of roles remains a problem."

"We will move to stop multicategorical resource rooms. These teachers will have to have certification in all areas they serve."

Issues of certification are directly related to issues involving flexibility in placing students and use of resource rooms, both of which will be addressed later in this report. However, concern over the quality of personnel delivering the instruction in these multicategorical settings is clearly an emergent issue in certification.

Summary

In the past four years, jurisdictions have taken steps to improve the quality of education, and jurisdictional regulatory policy has been exerted over the profession of teaching through more stringent licensing of teachers. Nonetheless, throughout this period, special education has continued to respond to the pressure of limited resources — fiscal, material, and human. This chapter has provided background information to establish a context for the further examination of the manpower situation in special education. Some of the issues — for instance, quality of personnel, control over the profession, and program options — will be addressed further in this document. At this point, however, it is important to consider that, despite all the emphasis on educational excellence, policymaking within special education has been guided by the exigencies of fiscal and manpower shortages. This paradox will become evident in the subsequent chapters of this report.

References

Darling-Hammond, L. (1984). *Beyond the commission reports: The coming crisis in teaching.* Santa Monica, CA: The Rand Corporation.

Feistritzer, C.E. (1983). *The condition of teaching: A state by state analysis* (Carnegie Foundation Technical Report). Princeton, NJ: The Carnegie Foundation.

Fraas, C.J. (1984). *Education of the handicapped* (Issue Brief No. 11378040). Washington, DC: Library of Congress.

Kaplan, G.R. (1985). *Items for an agenda: Educational research and the reports on excellence.* Washington, DC: American Educational Research Association.

Kirst, M.W. (1985, Spring). Renewing the teaching profession. *The Stanford Magazine.* Stanford, CA: Stanford University.

Schlechty, P.C., & Vance, V.S. (1983). Recruitment, selection and retention: The shape of the teaching force. *Elementary School Journal, 83* (4), 469-487.

Smith-Davis, J., Burke, P. J., & Noel, M.M. (1984). *Personnel to educate the handicapped in America: Supply and demand from a programmatic viewpoint.* College Park, MD: Institute for the Study of Exceptional Children and Youth, University of Maryland.

U.S. Department of Education. (1984). *To assure the free appropriate public education of all handicapped children. Sixth Annual Report to Congress on the Implementation of the Education of the Handicapped Act.* Washington, DC: U.S. Department of Education.

U.S. Department of Education. (1986). *To assure the free appropriate public education of all handicapped children. Eighth Annual Report to Congress on the Implementation of the Education of the Handicapped Act.* Washington, DC: U.S. Department of Education.

Chapter 2

SUPPLY AND DEMAND

This chapter presents results of the survey that pertain to the actual levels of personnel available to districts, as well as the factors that influence the supply of personnel. These results, though not quantitative, provide information as to areas of shortage and surplus of special education and related services personnel, as well as the availability of training programs and supplies of new graduates. The first sections present an overview of the status of the jurisdictions in terms of manpower and brief discussions of trends or features of the data including:

- Status of Preservice Programs
- Supply of New Graduates
- Pupil Enrollments and Preservice Enrollments
- Manpower Shortages and Surpluses

The problems surrounding manpower planning are not fully understood simply by documenting personnel shortages and supplies. While such quantitative issues are central to assuring adequate numbers of special educators, there are other important considerations in supply and demand. The second section of the chapter presents a synthesis of some of the factors that contribute to an understanding of the shortages and oversupplies discussed earlier.

This section addresses such issues as:

- Quality of personnel
- Less-than-full certification
- Attrition
- Reductions in force

The last section contains profiles of individual jurisdictions, reviewing and illuminating their unique situation with respect to manpower.

Dimensions of Supply and Demand: Current Status

Preservice Programs

At the base of the manpower structure are the preservice training programs that supply personnel in special education. An adequate supply of these personnel is dependent on an adequate number of programs. However, "adequacy" does not necessarily mean that all types of training programs exist in every jurisdiction. If jurisdictions can obtain the necessary personnel through out-of-state recruitment, the absence of a special program may not constitute a need. Conversely, the availability of training programs does not guarantee sufficiency of manpower supplies.

Table 2 presents data on preservice programs that are missing in each jurisdiction.* The term "program" does not always mean that the state has categorical certification and the specified categorical programs; programs may also refer to training tracks or specialty areas. In addition, it should be noted that respondents were asked to indicate what programs were missing, not what programs were critical for their manpower needs. For example, programs in bilingual special education, while frequently reported missing, were of concern to only four states. The table does not specify the number of programs within a given specialty area, nor program size in terms of numbers of graduates; it simply shows where programs exist.

Sixteen jurisdictions reported having training programs in all of the specialty areas. This compares to 12 in the 1982 survey. Four jurisdictions (Florida, Georgia, Missouri and Oregon) each added preservice programs during the past four years, so they now have training in all specialty areas. Several other jurisdictions reported increases in the numbers of training programs available in certain specialty areas. Arizona reported a new federally-funded project for rural personnel, and Montana, Michigan, and Rhode Island have new programs in Adaptive Physical Education. Maryland has a new program for "After Care Givers." In the Northern Marianas, an ac-

*The Key for abbreviations in Table 2 is provided following the table.

Table 2. Preservice Programs Missing*

	Missing	Ag (Gen)	EE/ME	LD	SED	MR	VI	HI	PH	SH	Multi	COMI	OT	PT	Speech	DC	Psych	O & M	Voc	Rh
Alabama	1						X													
Alaska	8		X		X		X	X		X		X			X		X			
Arizona	2												X						X	
Arkansas	5		X						X			X				X				X
California	HAS ALL																			
Colorado	1																			X
Connecticut	3						X	X				X								
Delaware	8						X	X		X	X	X	X		X			X		
Florida	HAS ALL																			
Georgia	HAS ALL																			
Hawaii	7						X	X	X			X	X	X				X		
Idaho	6						X			X		X	X	X				X		
Illinois	HAS ALL																			
Indiana	2						X											X		
Iowa	3						X	X					X							
Kansas	1						X													
Kentucky	1				X															
Louisiana	HAS ALL																			
Maine	1						X													
Maryland	HAS ALL																			
Massachusetts	HAS ALL																			
Michigan	HAS ALL																			
Minnesota	2										X							X		
Mississippi	1						X													
Missouri	HAS ALL																			
Montana	4						X	X					X	X						
Nebraska	6				X	X			X			X						X		X
Nevada	5				X		X	X			X					X				
New Hampshire	6						X	X		X	X	X						X	X	X
New Jersey	2									X						X				
New Mexico	9				X		X	X		X	X	X	X					X		X
New York	HAS ALL																			
North Carolina	HAS ALL																			
North Dakota	1																X			
Ohio	1																	X		
Oklahoma	1						X													
Oregon	HAS ALL																			
Pennsylvania	1																			X
Rhode Island	2												X	X						
South Carolina	3						X				X							X		
South Dakota	2												X	X						
Tennessee	1				X															
Texas	HAS ALL																			
Utah	4				X		X					X								X
Vermont	4						X	X					X	X						
Virginia	1						X													
Washington	HAS ALL																			
West Virginia	3						X	X					X							
Wisconsin	4						X					X						X		X
Wyoming	HAS ALL																			
Guam	18		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Puerto Rico	4									X			X	X	X					
BIA	N/A																			
Dist. of Columbia	HAS ALL																			
N. Marianas	15	X	X		X		X			X	X	X	X	X	X	X	X	X	X	X
American Samoa	Missing All																			
Virgin Islands	13				X		X	X		X	X	X	X	X	X	X	X	X	X	
TOTAL		2	5	2	11	3	28	14	5	11	10	15	16	11	7	7	6	15	6	11

*The Key for abbreviations in this table is provided below.

Table 2. Key: Preservice Programs Missing

Res (Gen)	Resource room teacher (generic)
ED/BD	Emotionally disturbed/behaviorally disordered
LD	Learning disabled
SED	Severely emotionally disturbed
MR	Mentally retarded
VI	Visually impaired/blind
HI	Hearing impaired/deaf
PH	Physically handicapped
SH	Severely handicapped
Multi	Multiply handicapped
COHI	Crippled & other health impairments
OT	Occupational therapy
PT	Physical therapy
SP	Speech
EC	Early childhood
Psych	Psychology
O & M	Orientation & mobility
Voc	Vocational education
Bil	Bilingual

credited two-year college was established in 1982. Through extension courses with San Jose State and the University of Guam, teachers can also graduate with a bachelor's degree. Several other jurisdictions reported additional programs in areas of the severely handicapped and Master's level programs in learning disabilities; three have new early childhood programs, and one state reported an additional program in the area of hearing impairment.

Several programs were lost during the past four years. A resource teacher training program at the University of Alaska was cut, leaving the state only one degree program, which is in learning disabilities. Georgia and Illinois each lost one speech and language program. Kentucky lost one of two training programs for severely/profoundly handicapped. In Nevada, the University of Nevada-Reno combined special education with elementary regular education as a result of Dean's Grants activities. Virginia lost its only program in the area of the visually handicapped, and Oregon, which added a training track in autism, was

unable to fill the faculty position in this area. While these examples do not represent the extent of program change which has occurred, they illustrate the flux in the training situation.

Overall, programs in visual impairment were still the most commonly absent across jurisdictions. While this lack of programs does not necessarily signal personnel crises within states, it does in some cases. At least one state (West Virginia) has contracted with out-of-state universities to provide six-week summer courses in both vision and hearing.

Next in frequency among the categories of training programs missing in the jurisdictions were occupational therapy, hearing impaired and low-incidence handicaps such as physically handicapped and crippled and other health impaired. Also noted as missing in many states were training programs for teachers of the seriously emotionally disturbed, severely handicapped and physical therapists. Although the follow-up survey added three jurisdictions and included some additions and changes in the categories of preservice programs, only minor shifts were reported in the rank order of programs missing. One state (Colorado) reported a new program in the area of the seriously emotionally disturbed and two jurisdictions gained training programs in the severely handicapped area. Nonetheless, these two areas remained the most frequently missing among the major disability areas.

On their own, these program tallies do not address the question of whether current programs are producing a sufficient number of graduates who are adequately prepared to teach the handicapped. The issues of the supply and quality of new graduates are addressed in the following sections.

Supply of New Graduates

The supply of new personnel is difficult to quantify with precision, in part because many jurisdictions have limited access to data regarding graduates. Three states that rely on data provided by their training programs indicated that they consider these figures to be inflated. By and large, in the jurisdictions that commented on supply, responses were based on ability to fill positions and, to a lesser degree, on cer-

tification applications. Of the 43 jurisdictions that reported such data, 19 indicated that the supply of new graduates was decreasing within their boundaries, 20 considered the supply stable if insufficient, and four noted an increase in graduates. The remaining 14 jurisdictions indicated that they had no data on graduates of teacher training programs.

The decreased supply of graduates was attributed to overall drops in enrollments in education programs. Among the four jurisdictions with more graduates, one indicated that the increase was due to a new certification program in elementary education — which does not mean that all these newly certified individuals will elect to teach special education. In other instances, some jurisdictions with a stable supply of graduates indicate that declining preservice enrollments in general education has not yet affected special education.

Three jurisdictions (Massachusetts, Pennsylvania, and Puerto Rico) stated that the supply of new graduates from their institutions of higher education was currently sufficient to meet their needs. In Massachusetts, despite the overall sufficient supply of graduates, it is very difficult to get teachers to move to rural areas, while there is an oversupply of graduates in urban and suburban districts.

Overall, the predominant shortage area is speech and language. This shortage is attributed to the recent change in the American Speech and Hearing Association (ASHA) licensing requirements that increased the preservice training to five-year or Master's level. At present, fewer new graduates in this area are available, and there is concern that fewer will enter training in the future because of the extended program requirement. Most important of all, perhaps, is the concern that as these personnel spend more time and money on their education, they will be less willing to work for public school salaries.

In discussing the supply of new personnel, staff representatives made frequent references to remote and inner city areas. Several jurisdictions speculated that their supply of graduates would be adequate if enough of them would accept positions in rural and inner city settings. Other jurisdictions reported that, although the overall manpower supply was insufficient, the numbers of new graduates specializing in the areas of severely and multiply handicapped and in early childhood appeared to be increasing.

Pupil Enrollments and Preservice Enrollments

In an attempt to provide some picture of future trends in personnel supply, comparisons were made between current preservice enrollments and child count. Again, it should be noted that most jurisdictions do not have absolute data regarding preservice enrollments. However, they do know when specific programs have been dropped or are in trouble due to reduced enrollments, as well as when programs have experienced notable growth.

Making predictions as to future manpower supply based on enrollment status is not altogether reasonable because actual supply is influenced by many other variables, for example, attrition, movement of new graduates across states, and alternate career choices. Career choice was specifically noted by four jurisdictions; they reported some increase in preservice enrollments, primarily as a function of increased numbers of regular education students obtaining certification in special education, but predicted that these students were unlikely to seek employment in the area of the handicapped. In addition, reported decreases in enrollments of handicapped students in all cases were slight and were frequently attributed to decreased numbers of learning disabled students resulting from new identification criteria and assessment procedures.

The projections of manpower supply based on preservice and handicapped pupil enrollments fall into the following three categories:

1. No changes in the current status of personnel supply (N = 18) IF:
   - Preservice enrollment is steady and pupil enrollment steady (N = 13);
   - Preservice enrollment is down and pupil enrollment down, declining proportionately (N = 4); or
   - Preservice enrollment is up and pupil enrollment up, increasing proportionately (N = 1).
2. A greater pool of available personnel (N= 4) IF:
   - Preservice enrollment is steady and pupil enrollment down (N = 3);
   - Preservice enrollment is up and pupil enrollment steady (N = 0); or
   - Preservice enrollment is up and pupil enrollment down (N = 1).

3. Shortages of new personnel (N = 28) IF:
   - Preservice enrollment is down and pupil enrollment steady (N = 6);
   - Preservice enrollment is down and pupil enrollment up (N = 12); or
   - Preservice enrollment is steady and pupil enrollment up (N = 10).

Based only on these two types of information, it is apparent that the majority of jurisdictions are facing future personnel shortages, in most cases because of a combination of decreased or stable special education enrollments and increases in the child count.

Several factors may modify the predictions. As noted before, increasing preservice enrollments are considered to be somewhat inflated because they include practicing personnel enrolled to obtain certification. Many of these personnel are currently teaching in general education and are considered unlikely to leave these positions to teach in special education. In other words, a portion of the reported preservice enrollments do not represent new personnel in the pipeline; thus, the future need situation is obscured. Such a situation exists, for example, in Delaware. In West Virginia, a new seniority provision appears to be prompting some graduates to become certified and take jobs in special education to build seniority so they can move into jobs in regular education.

It should be noted that there are cases where enrollments in one training program grow as a result of a lost program. For example, Alaska lost one preservice program and gained enrollment in the remaining program; there may have been no overall enrollment increase.

With respect to pupil enrollment, the number of handicapped children has continued to increase even in states where general pupil enrollment is down. Moreover, several jurisdictions reporting decreased child counts noted that the number of handicapped children was decreasing at a proportionately lower rate than enrollment for all school-aged children. Thus, if the projected increases in the school-age population occur, there is likely to be an increased number of handicapped children in almost all jurisdictions. This pupil increase alone could result in widespread shortfalls of personnel across all jurisdictions.

Manpower Shortages and Surpluses

In addition to commenting on the availability of new graduates, respondents were asked to identify areas of personnel shortages and surpluses. Specifically, they were asked to review the information provided in 1982 and to update the status of personnel in their individual states. As in 1982, the intent was not to establish a national body count, but rather to provide a picture of where personnel shortages or surpluses appear to be prevalent.

Table 3 presents the areas of shortage by jurisdiction.* The most frequently noted shortage areas were in the related services and speech and language. Forty-seven jurisdictions reported shortages of physical therapists, while 46 indicated a shortage of occupational therapists. Next in frequency of reported need were speech and language personnel (reported by 41 jurisdictions), followed closely by teachers of the seriously emotionally disturbed and behaviorally disordered (40 jurisdictions). The area of the severely handicapped was reported as a shortage by 33 jurisdictions, with 26 jurisdictions reporting shortages in the multiply handicapped area. Among classroom personnel, shortages were also reported in the early childhood area by 32 jurisdictions; these were particularly critical in states that had recently expanded services to younger populations. Ten jurisdictions reported shortages in all categories, while eight states reported rural shortages in every personnel category.

In the follow-up interview, respondents were asked to comment on the relative improvement or worsening of the personnel situation in their state or jurisdiction since 1982. In addition, current information was compared to that presented in the first report, and jurisdictions were rated as "same," "improved," or "worse." Jurisdictions rated as improved reported fewer shortage areas or indicated that personnel shortages were less critical. When a jurisdiction reported shortages in more categories or more critical shortages in certain areas, the situation was judged to be worsened. In the follow-up interview, 14 jurisdictions indicated improved conditions and 13 reported worsening shortages. In the remainder of the jurisdictions, personnel

*The Key for abbreviations in Table 3 is provided following the table.

Table 3. Personnel Shortages

	All	LT	ST	Jail	EMERG MED	GM	MC	Psych	VI	CD	DMC	HI	Pediat	OB	Fam	OMFS	OPHTH	Oth	GS	OTH	Audiology	Dent
Alabama	All R			X	X					X												
Alaska																				X		
Arizona		X	X	X	X	R	X		R			R							R			
Arkansas				X	X	X	X		X			X				X	X			X	X	
California		X	X		X	R	X		X	X	X			R	X		X	X		S			
Colorado	All R																					
Connecticut	All C																					
Delaware		S	S		X				X	X	X			X								
Florida	All R	S	S	S	S				X	S						X				S	X	
Georgia	All R			S																		
Hawaii		X	X	X					X		X	X			X					X		X
Idaho	All C																					
Illinois		X	X	S	X			X					X		X				X			
Indiana		X	X		X			S	X	X	X	S	S	X	X	X	X	X			S	
Iowa		X	X		X	X	X	X		X	X							X				
Kansas		S	S	S			S	S	S	X		S	S	S			S		S		S		S
Kentucky		X	X	X	S	X		X	X	X	X	S		X	X	X	X			S		S	X	X
Louisiana					X	X																
Maine	All C				S					S												
Maryland		X	X	R		S	S															
Massachusetts		R	R	R																		
Michigan		X	X		R			X			S				S			X				
Minnesota				R			R	R	R			R				X		R		X		
Mississippi				S		S											X					
Missouri	All R	X	X	S	X	S			S			S										
Montana		X	X	X	X		X	R			X		X							R		X	R
Nebraska		X		S	S	X	X		X		X	X	X									
Nevada	All C																					
New Hampshire			S	S	X		X			X	X		X	X								
New Jersey		X	X				X								X							
New Mexico	All C				S					S			S									
New York		R	R			X				X						X			X			
North Carolina	All C				S															S		
North Dakota		X	X	X	X		S	R														
Ohio		X	X			S				S												
Oklahoma	All R								X				X							X		
Oregon	All R					X			X							X				X		X	
Pennsylvania		S							X							S			S			
Rhode Island		X	X	S																		
South Carolina		X	X		X							X					X				X	
South Dakota		X	X		X	X		X					X			X				X		
Tennessee		X	X	X	X	X		X	X									X				
Texas					X				X		X				X	X			X			
Utah	All C			S	S																	
Vermont				X									X									
Virginia		S	S	S	X		X			X		S		S								
Washington	All R										X											
West Virginia		X	X	X	X				X	S		X		X								
Wisconsin		X	X	R	S		X			R	S											
Wyoming		R	R								X				X							
Guam	All C										S											
Puerto Rico		S	S	S		X		S														
BIA	All C	S	S																			
Dist. of Columbia																						X
N. Marianas		X	X	S	S	S		S												S		
American Samoa		S	S	S				S										X				
Virgin Islands	All C	S	S	S																		
TOTAL		47	46	41	40	33	32	32	32	30	30	29	26	26	26	25	25	24	23	23	22	21	21	21	2

*The Key for abbreviations in this table is provided below.

All C = The jurisdiction has shortages in all categories.
All R = The jurisdiction has shortages in all categories in rural areas.

X = All areas of jurisdiction
R = Rural
S = Severe

Table 3. Key: Personnel Shortages

PT	Physical therapists
OT	Occupational therapists
Speech	Speech therapists
EH/BD/ SED	Emotionally handicapped/behaviorally disordered/severely emotionally distrubed
EC	Early childhood educators
SH	Severely handicapped
Psych	Psychologists
VI	Visually impaired/blind
LD	Learning disabled
Sec	Secondary educators
HI	Hearing impaired/deaf
Multi	Multiply handicapped
MR	Mentally retarded
Voc	Vocational educators
Aut	Autism
O & M	Orientation & mobility
Res	Resource room teachers
Soc Wk	Social workers
Bil	Bilingual
D/B	Deaf/blind
Aud	Audiologists
COHI	Crippled & other health impairments
Gen	Generic
Admin	Administrators

situations were reported to be unchanged. Six additional jurisdictions reported experiencing personnel shortages in all categories at the time of the follow-up survey, while only one state was added to the "all rural areas" shortages list.

Personnel Surpluses

As shown in Table 4, a total of 20 jurisdictions reported having surplus personnel, that is, more personnel than available positions. Two states, Pennsylvania and Rhode Island, reported general surpluses in most areas. Indiana, Nebraska, Tennessee, and Texas reported surpluses in many categories in metropolitan areas. The remaining reported surpluses were primarily in the areas of the mildly

Table 4. Personnel Surpluses

	No Surplus	Surplus
Alabama		Mentally retarded-urban only
Alaska	X	
Arizona		Mildly handicapped in urban areas
Arkansas	X	
California	X	
Colorado		Mildly handicapped
Connecticut	X	
Delaware	X	
Florida		Educationally handicapped in urban areas
Georgia	X	
Hawaii	X	
Idaho	X	
Illinois	X	
Indiana		Surplus in major urban area, primarily speech & hearing
Iowa		Mental disabilities K-9 undergraduate
Kansas		NOT KNOWN
Kentucky	X	
Louisiana	X	
Maine	X	
Maryland	X	
Massachusetts		Mildly handicapped in urban areas
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri	X	
Montana	X	
Nebraska		Some surplus in metropolitan areas
Nevada	X	
New Hampshire	X	
New Jersey	X	
New Mexico	X	
New York	X	
North Carolina	X	
North Dakota		Mentally handicapped, LD, speech surplus in urban areas
Ohio	X	
Oklahoma		LD in metropolitan areas
Oregon	X	
Pennsylvania		Surplus in most areas
Rhode Island		Surplus in all areas except OT & PT
South Carolina		Trainable mentally handicapped, LD surplus
South Dakota	X	
Tennessee		General special education surplus in urban areas
Texas		Surplus in urban areas
Utah	X	
Vermont	X	
Virginia	X	
Washington		Mildly handicapped in urban areas
West Virginia	X	
Wisconsin		Mild MR
Wyoming	X	
Guam	X	
Puerto Rico	X	
BIA	X	
Dist. of Columbia		Mildly handicapped
N. Marianas		Generalist area
American Samoa	X	
Virgin Islands	X	
TOTAL	37	20

handicapped and/or general special education, usually within the larger metropolitan areas. However, several jurisdictions reported that there were fewer such surplus teachers than four years ago.

There was no one definitive reason for the reduction in the number of jurisdictions reporting surpluses. Several individuals speculated that fewer students were going into education of the mildly handicapped. Another frequent explanation was that the surpluses of four years ago were the result of reductions in force (RIFs) and program cutbacks; the personnel without jobs at that time, it was suggested, had subsequently been rehired or had left the profession.

It is difficult to compare the situation of oversupply with the previous report, given the extreme fiscal conditions that prevailed at that time, particularly with respect to reductions in force. Nonetheless, it does appear that in some urban areas there are legitimate teacher surpluses, that is, surpluses that are not merely the result of economic cutbacks. On the whole, however, when one compares the information in Tables 3 and 4, it seems clear that the demand for personnel remains significantly greater than the available and projected supply.

Factors Contributing to Manpower Supplies

Quality of Personnel

Next to personnel shortages, the issue most often mentioned by the states was the quality of special education personnel, both new graduates and practicing teachers. Among the 57 jurisdictions responding, only nine expressed no concerns about personnel quality and no awareness of such concerns at the local level. To summarize areas of concern, comments about the quality have been categorized and counted.

One of the most frequently expressed areas of concern was the abilities of generic or cross-categorical teachers (N=8). Among the comments on this issue are the following:

"Some of the higher education programs are moving to generic or noncategorical training so their grads can get as many licenses as possible. We have real mixed feelings and concerns about what skills they'll have."

"The whole preparation of new folks coming into the resource room is more of a concern now than it was in 1982 . . . The new ones aren't trained as well to work with kids and to help the classroom teacher."

"The absence of categorical competence is absolutely appalling over the country. Trainers seem to have a penchant for small issues and forget that there is a whole technology for education of the deaf . . . for example. People are coming out of programs as generalists, but it's hard to say what in. People are specializing in transition and things like that. We look at roles rather than a set of skills."

"Over the years, the preservice programs have become more generic and this is causing some problems. There is concern about the depth of training."

"We would like to retrain our teachers. Institutions of higher education are not training people to deal with secondary or early childhood. Programs do not address levels of severity nor differences in age categories. This is a real problem."

"Generally, personnel are well-trained, but there are some complaints from the districts regarding specific competencies for more severe handicaps. The problem is cross-categorical certification. Higher education says it can't put all the competencies into a training program, and problems occur when teachers are given students they haven't been trained to teach."

A second major area of concern (N = 8) relates to application of procedures and development of Individual Educational Plans (IEPs). Comments from the states include:

"The main difficulty in the teachers is in relation to doing their P.L. 94-142 paperwork in an expeditious manner. There is too much paperwork (but) it would be a great favor to personnel if they could be prepared to handle it with less time consumed."

"There is a lot of criticism from districts about preservice training. New graduates lack knowledge of state rules and regulations, eligibility criteria, writing IEPs, working on teams and communication."

"Preservice fails on the IEP. Inservice is providing the training, particularly in writing goals and objectives. New

graduates seem unable to distinguish the two or otherwise deal with IEPs."

"The institutions of higher education don't train what we need. For example, they train students to do lesson plans, not IEPs, so we have to train them. We're looking at a fifth-year internship at the local district level to give new graduates the needed skills; they're not finished products when they graduate."

"We have some real concerns about the skills of new personnel. We have a proposal for special education administrators to meet with the state education agency and higher education programs to discuss the matter. The biggest issue is IEPs; new grads are not prepared to participate in the IEP process."

Seven jurisdictions reported concerns about the skills of teachers of the emotionally disturbed and the management of severe behaviors. In some cases, the states stated that licensed teachers were available to be hired for the seriously emotionally disabled programs, but the skill levels of these teachers were considered inadequate for the positions. Among the comments were:

"There are serious concerns about the quality of SED teachers. We're getting enough grads, but they can't cope with the behaviors, particularly at the secondary level."

"Emotionally disturbed training programs are lacking in behavior management techniques. Behavior management is a preservice weakness across the board, actually. The state has put three hours of behavior management training into each certification category."

"There should be much stronger training in behavior management and intervention, particularly for teachers of the behavior disordered."

"In relation to [the shortages in] emotional disturbance, there are plenty of people with the general certification, but there are not enough people with the actual skills. The state is meeting with trainers from higher education to see what can be done."

Concerns about the lack of practical experience and field training were expressed by six jurisdictions in comments like these:

"Preservice programs aren't competency based, and students don't get enough practical experience; they don't know what they're doing when they get into public school classrooms. Many new grads don't even know about due process."

"The preservice program is spread very broadly but does not focus in depth. There is often a mismatch between the training and what teachers end up doing in the schools. One university is going to emphasize more field training at the undergraduate level."

"I would like to see an internship year as the first year of teaching, with preservice/inservice cooperation. There is a lot of burnout occurring because of the lack of experience and proper preparation. Retention would be better with this kind of fifth year."

The following comments were typical of the concerns voiced as to skills of new teachers of the severely handicapped:

"I don't think the competencies are [taught] as they are listed in the program. [The training programs] are doing okay for the mildly handicapped but are not adequate for moderate/severe. The state retrains through inservice."

"'Severe' training tends to be trainable mentally retarded training and not applicable for the specialty areas."

"In the severe area and sensory disorders there are concerns about the depth of training."

The remaining areas of concern included five comments on the need for personnel with more refined assessment and diagnostic skills, four comments about the quality of secondary-level personnel, and two comments on each of several issues, such as teachers' inability to function on multidisciplinary teams, lack of cooperation and coordination among state and local education agencies, and the training programs. On the positive side, four jurisdictions cited some improvements in the quality of personnel, although two of these noted concerns as well. Among these comments were the following:

"The people graduating are better prepared than five or ten years ago. We are proud of most of our programs."

"Training is better for severely handicapped personnel across the board. Some programs are better, but there is not massive change. Universities are starting to hire more up-to-date professors."

"Over the years the preservice programs continue to improve, but there are still concerns about depth of programs, methods courses in LD, MR, and behavior disorders."

"The quality of new personnel is better than it was in 1982, but the quantity is not improved."

It should be noted that comments made by representatives of special jurisdictions, suh as the territories, were not included because they rely heavily on training programs outside their jurisdictions for supplies of new personnel and tend to exercise limited control over programs. Both Guam and the Northern Mariana Islands are experiencing definite problems with lack of adequately trained personnel who are matched to their positions. In the Northern Mariana Islands, there are no indigenous degreed personnel in special education or related services. Puerto Rico reports problems with related services personnel; they are clinically trained but not trained for work in public schools. The Virgin Islands considers most of its personnel well trained, with some exceptions in the area of assessment and diagnosis and specialized areas such as LD, MH, and Severe ED. Additionally, the Virgin Islands has a critical shortage of related services personnel such as speech therapists and physical therapists.

From the comments it is evident that, on the whole, states are not pleased with the quality of the personnel that they receive from the training programs, nor are states passively accepting these products. One evidence of the extent of the concern is the school reform legislation enacted over the past two years, which is creating more stringent licensing requirements. In fact, the comments tended to support increased local intervention in training and licensure. Because states feel that the skills of new graduates are not matched to job responsibilities or expectations, the states are creating their own training and internship requirements apart from those of the preservice programs. The more stringent of these requirements represent an erosion of higher education's control over entry into the profession.

These comments represent only one perspective. The quality of personnel cannot be considered separately from the environments in which teachers are expected to teach; the teaching environment is affected by class size, mix of handicaps, available resources or support, and other factors. Two jurisdictions commented on the problems faced by trainers who were being asked to prepare teachers for K-12 cross-categorical certification within a traditional four-year program. One state representative noted that higher education is subjected to the same fiscal and political pressures as the public schools, which makes it very difficult to change programs, create new programs, or expand training. On the whole, however, the tone of comments was adversarial, with the states attempting to upgrade quality by exercising their authority over licensing.

Less-than-Full Certification

Closely related to the quality of special education personnel is the practice of granting emergency, out-of-field, temporary, or other forms of less-than-full certification to personnel who do not meet a jurisdiction's special education licensure requirements. Among the questions in the interview was one relating to increases or decreases in the need to grant such certificates. Of the 41 jurisdictions reporting, 19 indicated that they were issuing the same number of waivers or provisional certificates each year, while 13 had actually experienced an increase in numbers issued. Only seven reported a decrease, while two reported that the practice had been eliminated by legislative action.

From the spokespersons in states with increasing numbers of provisionally certified personnel came comments like these:

"There are only 54 full-time certified teachers of the emotionally disturbed, and 20 districts are saying that this position is hard to fill . . . Districts are probably hiring more non-certified personnel. Provisional certification is allowed and should be given to someone enrolled in a training program, but a person can develop his or her own individual professional development plan or go through a review by a panel of experts and be certified."

"We will issue 45 waivers for non-certified people and will make administrative exceptions for special education out of category."

"The need for temporary certification is declining somewhat at the elementary level, but there is a big increase at the secondary level."

"Provisional certification is up 40 percent. It requires a request and that the person take courses. The locals waive the requirements and hire whomever they want."

"Over 42 percent of our teachers have less-than-full certification; they have some type of emergency certification. There are many varieties of this, but all must be pursuing some kind of special education certification. However, in documented emergency cases, districts can get provisional certification for anyone with a college degree. A lot of the speech people have only a bachelor's degree and aren't licensed."

"The number of temporary approvals of teachers has increased greatly over the past few years. If a person is endorsed in any area of special education, that person can teach any type of handicap if he or she enrolls in three credit hours a semester."

"We have over one-third of our special educators on emergency certificates."

"Changes in certification policies are more strict, and districts hired people to meet the old standards so lots of people are on provisional certificates until they can meet the new requirements. The universities are not geared up yet to train all these people."

Of those jurisdictions reporting decreases in the number of provisional certificates awarded, only Alaska indicated that no special education teachers were provisionally certified. Teacher salaries in Alaska, which are the highest in the nation, were cited as the reason for the state's adequate supply of fully certified teachers. More typical of the states reporting decreases was Indiana, which, despite the decrease, reported having over 100 special educators on limited licenses. (It should be noted, in considering future personnel supplies, that enrollment figures will be inflated by the Master's programs in which limited license teachers are enrolled.)

Jurisdictions reporting no change in requests for certification waivers still tended to report significant numbers of

personnel on temporary certification. In one jurisdiction, requests had decreased for LD and MR personnel and had greatly increased for SED, with a net effect of no change. In two other jurisdictions, the change to generic certification was cited as the reason for no increase in provisional certificates. Most states use provisional certification to accommodate shortages. Two states did say that their districts would first try to get waivers to increase class loads, but would subsequently seek emergency certification.

There is some indication that states are attempting to exert a degree of quality control over the temporary licensing of teachers. Texas is anticipating new rules governing initial certification in its new certification requirements. In Kansas, provisional certification will be phased out by July, 1986. In Iowa, there was a recent attempt by the legislature to remove certification from the Department of Public Instruction and establish a separate board. This attempt, which was vetoed by the Governor, came about because of the large number of temporary certificates and because the state was perceived as being lax in certification standards.

Among jurisdictions with more strict requirements for temporary certification is Tennessee, which has established a point system for determining waivers. For example, a person with endorsement in one area of special education seeking to teach another handicap gets more points than would a music teacher coming into special education. Waivers are granted for a maximum of two years, and people on waivers must have six hours of study toward endorsements and must submit a two-year plan for completing the coursework, specifying where and when they will take it.

Despite new efforts to improve quality through more stringent licensing requirements, the use of less-than-full certification seems to be a thriving practice among states. Clearly it is the primary means for dealing with personnel shortages and, at the same time, meeting the mandate for services.

Attrition

Interview participants were able to provide little information regarding attrition, or loss of personnel from posi-

tions. Only general questions regarding attrition were asked, but many interviewees had little information on the turnover of positions, burnout, or other factors that cause teachers to leave the field. They generally reported that the state office received information regarding vacancies, but that it was difficult to know how many vacancies were the result of program expansion and how many were attributable to actual losses of personnel from the field.

Attrition problems were greatest in the territories, where non-local personnel turn over on the average of every two years. Program development is very difficult with this constant change among teachers and other specialists, and local staff are inclined to continue the status quo because they know that new people will soon leave. Turnover of personnel is also very high in rural/remote areas and inner-city schools where personnel typically either "leave in two years or stay forever." It is not unusual for teachers to take jobs in more rural areas only to get one or two years' experience so they can be more competitive for positions in more metropolitan areas. Finally, jurisdictions report suspected high rates of attrition (two-thirds or more of the teachers over a three to four-year period) in positions for severely handicapped and behaviorally disordered. In general, however, state representatives acknowledged having little reliable information or data on attrition.

Reductions in Force

A major change during the period between the first manpower survey and this follow-up is in the area of RIFs. In 1982, during extreme fiscal cutbacks, 24 jurisdictions reported that personnel were being "riffed." In 12 of those jurisdictions, regular educators with more seniority could "bump" special educators, that is, take their jobs. Special educators who had lost their jobs were reported to be working as aides, moving to more rural areas, and even "cashiering in Safeway."

In the follow-up survey, only six jurisdictions reported RIFs, and these were in isolated areas and were decreasing. Mississippi, Michigan, and Rhode Island report some RIFs which are now decreasing. In Michigan, tenured regular classroom teachers can still take the jobs of newer special

educators, but many of the special educators who lost their jobs four years ago are back in their positions. Oregon and Hawaii are reporting some RIFs of administrative people due to reorganization. Oregon also reports some replacement of special educators by regular educators. The position of special education director in Oregon is being replaced by that of general administrator for special education, Chapter I, and related programs.

While RIFs have stopped in most states, some (such as Iowa, Indiana, and Oklahoma) are still facing economic hardships and are reducing positions through attrition. As positions become vacant, they are not being filled. The majority of states, however, saw RIFs peak in 1982. Fiscal improvements have resulted in rehiring personnel, as well as in program expansion.

The tables and general summaries above provide an overview of the status of supply and demand of special education personnel across the nation; the following profiles provide a more individualized intrepretation of the manpower situation.

Individual Profiles

Alabama

There is some oversupply of teachers of the mentally retarded in urban areas, but several rural LEAs have reported needs for these personnel. There are statewide shortages in the areas of emotional conflict, learning disabilities, speech/language, and gifted and talented; these shortages are most critical in rural areas. The visually handicapped program is still missing. The supply of graduates is about the same as in 1982; there are no major concerns about the supply or quality of new graduates.

Alaska

There are not shortages; if there is any need, it is in the severely impaired area. There are quite a number of districts with only a few handicapped students. In these, a special education teacher and an aide are often placed in the regular classroom to teach the whole class, that is, the 20 or so regular and two handicapped students. Alaska has been getting more applications for certification than it can use.

With cuts in preservice programs, there are fewer graduates. There is now only one degree program, the one at Anchorage in learning disabilities. The program at Fairbanks may offer special education training in the coming year.

American Samoa

There are not enough teachers trained in special education, and the low salaries ($14,000 for Master's level teacher) make it difficult to attract and retain highly qualified teachers. In addition, the criterion of passing the English proficiency exam for entrance into the university training programs limits the number of teachers trained at the Associate's level seeking advanced degrees. Currently there is not a psychologist or psychiatrist on the island; therefore, a competency-based assessment process is being developed so that students can be assessed for eligibility in special education.

Arizona

The state has the same shortages as reported in 1982, with the addition of speech and language and early childhood. The legislature passed a law that allows districts to apply for state funds for preschool handicapped programs, on a voluntary basis. There is a shortage of trained personnel in the area of preschool handicapped, but there is no certification category for this area. There are some surplus teachers of the mildly handicapped (LD) in Phoenix and Tucson, but an undersupply in the rest of the state. The number of new graduates is the same, and no preservice programs have been lost. There is a new federally-funded project at Northern Arizona University that brings rural personnel in for the Master's degree. Overall, preservice enrollments have declined.

Arkansas

Enough new graduates are being supplied except in the speech and language area. The state is just beginning to get enough teachers of the severely handicapped meeting the new certification standards, but there are shortages of good SH teachers. The teachers of the mentally retarded who were "grandfathered in" are not equipped to deal with the more severe population, and the state is attempting to increase these teachers' skills through inservice programs. There

are still shortages in hearing impaired, visually impaired, and the seriously emotionally disturbed.

Bureau of Indian Affairs

There are shortages in most areas. The related services areas are critical. The number of applicants for available positions has remained stable, but there are not nearly enough. The BIA never gets enough new graduates. Many personnel who do come to these positions have no real understanding of the cultural differences and the isolation, so attrition is high. There are programs to prepare special educators to work with the Native Americans at Pennsylvania State University, Utah State University, Navajo Community College, California State University, University of South Dakota, and Northern Arizona University.

California

The state is facing a large teacher shortage. In the past concern has been only with rural shortages, but now shortages are widespread. Overloads or increased class sizes are continuing. New hires of paraprofessionals are not being allowed. No preservice programs have been lost or added. The quality of preservice programs for teachers of the severely handicapped has been steadily improving.

Colorado

There are some oversupplies of personnel in the mildly handicapped area. Shortages in most special education areas persist in the rural districts. The state gets a number of applications for certification because of the people who want to move to the area. Related services personnel in the discipline of occupational and physical therapy are in very short supply.

Connecticut

Projected numbers indicate a need for additional personnel in all areas of special education. There are no surplus personnel. The State Board of Education has revised various procedures and standards for the approval of preservice programs. One major area of change occurred in admission standards to teacher preparation programs. Can-

didates for admission must now pass a basic skills test or have SATs of 1000 or better (and at least 400 in each area).

Delaware

A "desperate" shortage of OTs and PTs is reported. Some progress has been made in the area of secondary-level teachers, although there are still shortages. A new state-supported transition project is anticipated to help the secondary shortages. There are no oversupplies of personnel in special education, only in regular education. There are more new graduates in special education because the University of Delaware now has a program certifying elementary teachers in special education. This increases the count of graduates, but not all take jobs in special education. Delaware State also has a new training program in special education. Overall, preservice enrollments appear stable.

District of Columbia

No shortages are reported. However, when the District started the new cooperative arrangement with the Department of Human Services, which agreed to provide OT and PT services in the schools, that department went through a year-long search for such personnel. Because all D.C. employees must live in the District, the pool of applicants is limited. As for surpluses, there are some oversupplies of teachers in the noncategorical area of mildly handicapped.

Florida

There are critical shortages in the areas of emotionally handicapped, speech and language, occupational and physical therapy. Bilingual special educators are in short supply in some areas. Most rural areas have shortages in all personnel areas, and the area of the emotionally handicapped is critical across the state. There appears to be an overall surplus in the area of the mentally handicapped, with more people being trained than are needed. However, rural areas still have a shortage of personnel in this area.

The state needs more preservice training programs in the area of speech/language. There are now three, but one is needed in the southern part of the state. The numbers of new graduates have been stable, but with Florida's population increasing, there will be a need for more teachers.

Georgia

The state reports continued shortages in all areas; the speech area is very serious, and the rural shortages remain critical. There are no oversupplies. The speech/language preservice program at Emory was dropped and a new one begun at West Georgia College.

Guam

The shortages are about the same. A big problem is at the secondary level. Out of 47 positions, 15 teachers are on limited term certificates. At the elementary level, all but one teacher is fully certified.

The supply of new graduates is more problematic. The special education program at the University of Guam has not been able to attract enough students, so it has been necessary to rely on off-island programs. Recruitment efforts are being increased. Currently, the University of Guam turns out only six or seven graduates a semester. The program combines both elementary and special education, so some graduates never even come into special education. Last year 30 resource room positions turned over, but the University could only provide 10 new graduates. Those teaching on limited term certification are increasing in number. Training has not kept up with district programming; that is, students are not being trained in the areas districts need.

Hawaii

The shortage areas have remained essentially the same as reported in 1982. The greatest area of shortage is speech pathologists. There have been some fluctuations in attrition rates. In Hawaii there are no real oversupplies. As many teachers are nearing retirement age, it is anticipated that many new positions will become available. Still difficult to fill are vacancies in outlying areas and remote neighboring islands. Part-time and temporary positions are sometimes difficult to fill and may be held by teachers with only provisional certification.

Preservice programs in visually handicapped and hearing impaired are still lacking. There have been no losses in

training programs, and the university has augmented and reorganized to meet changing needs in state certification training programs. The fact that Hawaii has only one major institution of higher education is a major drawback.

Idaho

Shortages remain the same, and there are no oversupplies. Staffing at colleges and universities has been held to no-growth, but there has been an increased focus on the quality of preservice programs with a concomitant decrease in inservice training. Some training programs have received Part D training grants for graduate programs, but the overall numbers of new graduates have remained stable.

Illinois

The state is entering a period of severe shortages. In speech and language, there are positions that cannot be filled; more than 60 openings were reported for the 1985–86 school year, and university programs cannot provide enough graduates. In total, Illinois has more than 250 (1985–86) vacancies for special educators; the high need areas are speech/language, BD, LD, and cross-categorical. Social workers and school psychologists are also needed. A new surge of need for vocational special educators is anticipated, particularly those who can deal with transition. Most districts are now using pre-vocational coordinators in this role.

At the beginning of P.L. 94-142, there were many personnel shortages. Then the shortages stabilized because there were far fewer new positions and it was easier to fill openings. Now, with a loosening of state and local revenues and the new emphasis on educational excellence and legislative support, new positions are again being added and personnel shortages increasing.

The state lost one preservice training program, in speech/language at Bradley University. Overall, the supply of new graduates in this area is decreasing, possibly because the training program is so long and extensive. The preservice enrollments in other specialty areas are really not known, but the state has an extensive university system that provides personnel for several neighboring states.

Indiana

Special education remains on the Commissioner's emergency list, but the shortages are not as severe as they were in 1982. Indianapolis has a somewhat larger number of teachers than it can employ, primarily in the speech and hearing area, and rural districts still have difficulty finding certified personnel. Overall, the personnel situation is a little better than in 1982 because more revenues are available, and RIFs are no longer occurring.

There are now two preservice programs in deaf education, at Ball State and Indiana State University, and there is still no preservice program in the visual handicap area. The state spent about $5,000 of last year's Part D money to send people out of state for certification in the area of the visually handicapped. The state is considering hiring an adjunct professor for the summer in this area, an alternative that would cost no more and would enable more people to get certified. About the same number of new graduates are available as in 1982; however, new graduates are eligible for more endorsements in special education than before.

Iowa

The shortage areas are the same as reported before, with the addition of the severely handicapped and preschool handicapped. Occupational and physical therapists are still in short supply.

Kansas

There are still personnel shortages. In 1982–83 there were 110 vacancies, primarily in the areas of LD, SED, and gifted and talented. In 1983–84 there were 85 vacancies, and the biggest shortages were still in the same areas. Speech/language ranks fourth in need. Only two vacancies were reported in OT and two in PT, and no real manpower need is apparent here; however, districts may not be providing these services. There are no data on surpluses. Kansas is lacking only one preservice program, which is in the visually handicapped area.

Kentucky

Due to certification changes, there is an increased demand for cross-categorical teachers across the state and a related decrease in the use of teachers certified in single

categorical areas. There are increased shortages because increased availability of state funding has created new programs, while the number of individuals entering the field has decreased.

Some preservice programs were lost because of the change to cross-categorical certification and not all of the former categorical programs changed their curricula. Furthermore, when programs became cross-categorical, the IHEs focused on the mild-moderate and not the severely handicapped. New certification requirements have been added to SED, early childhood and vocational education so preservice programs will have to address the needs of the severely handicapped.

Louisiana

There are consistent shortages in the areas of the severely handicapped and the seriously emotionally disturbed, but these shortages appear to be less serious. There is some concern, however, that identification of children in these categories has not been adequate.

The state has preservice training programs in all areas, and the SH programs increased from two to five during the two-year period. A number of IHEs have established a double major: elementary and mild/moderate special education. This program will increase special education enrollments, but may not increase the number of people entering the profession. Currently the supplies of new graduates are inadequate.

Maine

Shortages of personnel are worse than in 1982. The greatest needs are for SED and LD personnel. Many of those positions are currently filled with marginal and provisionally certified personnel. There is also a critical shortage of speech/language personnel. The numbers of available OT and PT personnel have improved slightly. No changes have taken place in the status of preservice training programs in the state.

Maryland

There are consistent shortages of related services personnel and speech/language personnel, particularly in the

rural areas. Districts have to contract for services or share personnel on a regional basis.

A recent report on teacher supply and demand in Maryland (1985–87) has underscored LEA needs for regular special education personnel, as well as those prepared to work in early childhood and with the severely handicapped. The state legislature has demonstrated its concern about present and future personnel shortages by requesting specific data from each of the state's 24 LEAs regarding their personnel needs.

Maryland has training programs in all areas, although the supply of graduates is insufficient to meet current and future personnel needs. It has a new preservice program in the area of visual impairment, designed by the state in cooperation with an IHE. A new program at Western Maryland for "After Care Givers" prepares graduates to work as community liaisons with deinstitutionalized children and adults.

Massachusetts

Rural areas of the state have shortages of itinerant specialists (OT, PT, and speech/language), while Boston has an oversupply of teachers of the mildly handicapped. There were some statewide problems when ASHA changed licensure requirements and some clinicians lost their licenses, but they are now regaining certification.

Massachusetts has all preservice training programs. Enrollments are generally up in all higher education programs, and out-of-state students seem to be increasing; however, the status of special education enrollments is not known. There appears to be an adequate supply of new graduates, although many will not go to rural areas. For those who do take rural jobs, attrition rates are high.

Michigan

Among the personnel in short supply are school social workers, school psychologists, OTs and PTs, particularly in rural areas. There is also a critical shortage of teachers of the emotionally impaired in rural areas. Shortages are anticipated in secondary and vocational education because programs are being added or expanded and training programs are providing too few of these types of personnel.

There are still instances of RIFs in which tenured general education teachers are bumping special educators. However, these are scattered, and some of the special educators who lost positions in RIFs four years ago have been rehired.

Enrollments are down in all preservice programs. However, no preservice training programs have been lost in special education. The greatest need for preservice training expansion is in the secondary and vocational areas, as noted above.

Minnesota

There are severe shortages in SED/BD, LD and early childhood. The most qualified early childhood teachers available tend to be the regular preschool teachers, so many certification variances are being issued. However, this practice changed in 1985–86. Rural areas also face consistent shortages of personnel in speech/language, visual impairment, and hearing impairment, as well as in psychologists and social workers. No surplus personnel are reported in the state.

The numbers of new graduates are decreasing and preservice enrollments are also down. There are not enough new teachers in several areas. The state is still lacking a training program in the physically handicapped. Practically speaking, there is no training program in the area of severely and multiply handicapped. There is a new training program in adaptive physical education and in early childhood special education, and over the next few years supply in these areas is anticipated to catch up with demand. However, shortages are likely to continue in other areas.

Mississippi

The greatest shortages are in all low incidence handicaps and speech/language; districts always need more of such personnel than they can find. While these are statewide shortages, all are more severe in rural areas. There are also some shortages of LD/MR resource room teachers in rural areas. No oversupplies of personnel are reported. The state is missing a preservice program in the visually handicapped. Preservice enrollments are reportedly down, but no programs have been lost. Many of the graduates from the state programs take jobs in Louisiana, Florida, and Alabama.

If locally trained people would stay in Mississippi, there might be an adequate supply of special education teachers.

Missouri

There are severe statewide shortages in speech/language. In addition to the speech/language area, there are severe shortages in hearing impaired, visually impaired, and severely and multiply handicapped. Inroads are being made with the SED/BD area, but there are still not enough of these teachers. There are also consistent shortages of OTs and PTs. All shortages are much worse in the rural areas.

Montana

In addition to the shortages indicated in Table 3, the state reports some spot shortages of LD teachers and teachers of the deaf and hearing impaired. Overall, there is a need for more "competent generalists" who can work in rural areas.

The supply of graduates is consistent but insufficient to meet the state's needs. The University of Montana received a Part D training grant in adaptive physical education, which should increase the number of graduates. The state has also helped "beef up" the program at Eastern Montana State College, which lost the director of its severely handicapped program and the training program. There is now a new director, and the program is back on track.

Nebraska

The most serious shortage area is SED/BD. Adequate numbers of personnel are available in the mild/moderate areas because changes in certification combined several categorical areas. Slight surpluses of special education personnel are reported in metropolitan areas.

The supply of new graduates is about the same. However, programs have been restructured because of certification changes.

Nevada

No real changes in personnel shortages are reported since 1982. There are some sporadic shortages in the SED/

BD area. In the area of the severely handicapped, while there are few openings, there is a need for personnel with more training in working with this population. The certification requirements are not sufficiently specific in this area. Some classrooms are empty because teachers cannot be found or choose not to work in a particular region. Some bilingual personnel would be useful.

There appear to be fewer graduates than in 1982, and there have been some changes in preservice programs. The University of Las Vegas lost its federal training grant in early childhood and with it the early childhood program. The University of Reno is combining special education and regular education, which may result in more certified teachers.

New Hampshire

The gap between supply and demand is evenly distributed across categories within the state with the overall situation growing worse. Shortages are critical in SED/BD and severely handicapped. Among support personnel, there is a shortage of speech therapists and OTs.

Teacher shortages in the state have been noted in the past; now they are on the verge of a highly critical situation. Not only are there teacher shortages across the board but the number of new graduates from teacher training programs has dropped at a rate of about 20 percent a year over the last few years. In response, the State Board has developed a competency-based training program to enable people to gain the skills they lack for special education certification. Incoming candidates are evaluated to identify areas of mastery and need; training modules are then used to train personnel in those areas of need. It is anticipated that regular education teachers, paraprofessionals and teachers will return to the field to participate in this program.

New Jersey

There are slight statewide shortages of OTs, PTs, home instruction staff and vocational education teachers for special education. A shortage of early childhood specialists has resulted from expansion of the program. No oversupplies are evident.

The state is still missing preservice training programs in the early childhood and severely handicapped areas.

Enrollments appear stable, but the state has no real data on graduates. There is no problem attracting a sufficient supply of graduates from in-state or neighboring states.

New Mexico

The primary shortage areas are in the areas of SED/BD, LD, and the multiply handicapped. Shortages in other specialty areas are not as acute as they were in 1982, but still exist in urban and rural communities. The state is now able to provide most of the necessary programs. There has been an improvement in the ability to provide ancillary services (OT, PT, speech). In 1982–83, 12 percent of these openings were unfilled; this figure was down to eight percent in 1983–84 and six percent in 1984–85. These improvements have resulted from additional personnel coming into the state (through better advertising) and from more efficient deployment of these personnel.

Western New Mexico University added a Master's program in LD and MR, and the gifted/talented position at the University of New Mexico, lost in 1982, has been restored on a hard money basis.

New York

The manpower situation has not changed much over the past four years. Shortages in the severely handicapped and autistic areas have diminished, but they still exist. Although the general certificate certifies graduates in these specialty areas, many do not feel qualified to apply for such positions. This is less of a problem with LD positions, which may also be filled by teachers with a general certificate. In fact, the eligibility of any teacher with a general certificate to work with LD students partially accounts for the lack of reported shortages in this area.

The need for OTs and PTs exists primarily in rural areas. In New York City, however, there is such a shortage of fully trained special educators that regular educators with only six hours of credits in special education are teaching handicapped students. One reason for the tremendous hiring difficulties in New York City is that the newest teachers are placed in the worst schools; many qualified teachers will not take jobs in the city.

The numbers of new graduates have remained stable. However, cuts in federal grant monies have resulted in

some reductions in graduate-level programs, although none have been officially lost.

North Carolina

The state has consistent shortages in all areas. There are severe statewide shortages of audiologists, speech-language impaired personnel, and teachers for the behaviorally/ emotionally handicapped. Consistent shortages of OTs, PTs and personnel in all other ancillary areas are reported.

Despite an increase of two additional preservice training programs, the state is projecting a slight decrease in the numbers of new graduates. This decrease is due to a decline in the number of students going into education and an apparent decline in the number of new students staying in education.

North Dakota

The shortage areas reported in 1982 remain. The early childhood shortage has become severe because services are now mandated for ages 3-21. The need for SED/BD teachers has become pronounced. Over the past two years, the shortage of speech/language personnel has declined somewhat. In urban areas, there are some surplus teachers, particularly in the LD, speech, and mentally handicapped areas. There are fewer new applicants than before, but current preservice enrollments are about the same. No preservice training programs have been added or lost.

Northern Mariana Islands

There is little turnover of general special education personnel on the islands. The people who first filled the special education positions are not leaving; however, on the whole they are not well trained. The shortages are most severe in specialty areas such as school psychology/evaluation, speech/language, severely handicapped, severely emotionally disturbed and deaf-blind (although there are few children identified as severely handicapped and only two identified as deaf-blind). Nor are there enough OTs and PTs. Because of their location, the islands have difficulty attracting specialists. When specialists do come, they tend to stay no more than two years, which severely hampers any program development efforts.

There is some of oversupply of the "generalist" special educators who are local people. The Northern Marianas College, established in 1982 and accredited in 1984, offers undergraduate courses in special education. San Jose State University offers extension graduate courses on the islands. Through the local college, certification programs were recently established in hearing impairment, learning disabilities, physically handicapped, and mentally handicapped; however, these programs are being taught by personnel who also provide full-time direct service.

The training and expertise of the teachers now working in special education are questionable. Until quite recently, all special education personnel were local people and were trained through regular education. Most have stayed in the classrooms and taken courses in special education in a haphazard manner without enrolling in a graduate program. Not a single local student has completed a special education program. Specialists are hired from the mainland, and the islands borrow personnel from Guam. Recently some OTs and PTs were recruited from the Phillipines, and the districts are very impressed with these people and plan to do more recruiting there. A few local people are being trained in OT and PT at the paraprofessional level through federal funding.

Ohio

The state funds the Dean's Task Force on Personnel Preparation for the Handicapped, which meets every four to six weeks and keeps abreast of the manpower needs. There are 38–39 IHEs with special education programs in the state (the one at Xavier University was dropped last year), so there is a good supply of new graduates. There are continued shortages of OTs and PTs and some rural shortages of LD teachers and teachers in low incidence handicaps. There is a large surplus of regular educators but not special educators. Enrollments in regular and special education preservice training programs are reported to be down.

Oklahoma

There are consistent statewide personnel shortages in the areas of deaf-blind, multiply handicapped and other low incidence areas, and rural areas have shortages in all areas. There is a slight oversupply of LD teachers in metropolitan areas, as well as a heavy concentration of related services

personnel. The situation with speech/language is improving because districts have gone to multi-district arrangements and contracting for services.

The state is still missing a preservice program in the visually handicapped area, but there are new training programs in the area of the emotionally disturbed. Overall, however, special education enrollments are down and the number of new graduates has been steadily decreasing.

Oregon

The state is short of teachers in all severe areas, that is, to work with severely handicapped, blind (it is particularly difficult to find teachers in this area), deaf-blind, crippled, and autistic students. At present, there is a need for 30 teachers in autism because 18 months ago the legislature approved new programs for autistic children, but there are not preservice training programs in this area. Currently, only five teachers in the state have actual training in autism. There are open positions in teacher training for autism, but there is a lack of qualified applicants. Most services for severely handicapped are provided in regional programs and rely on consultants and itinerant teachers. Most rural districts have one speech/language person serving 60 students throughout a whole county.

There are no oversupplies of teachers. If fact, some districts prefer hiring teachers of the mildly handicapped for regular classrooms because they know basic skills and curriculum. The number of new graduates is about the same as in the past. However, enrollments do not match exactly the areas of need. The higher education people are under the same kinds of pressures that face local districts. The Board of Education is questioning full-time equivalents (FTEs) in programs, particularly where there are few students, as the deaf-blind area.

Pennsylvania

The state recently surveyed its Intermediate Units (IUs) and asked about: 1) vacancies in the low incidence areas; 2) vacancies in other areas; and 3) vacancies for substitutes with certification. The survey asked about vacancies unfilled due to lack of graduates, constraints that limit applications, and projections for staff during the next five

years. Over three-fourths of the IUs responded. Results indicated that two-thirds of the districts have no vacancies in the low incidence areas; as compared with previous years, this was a decrease in vacancies. In the areas of visually handicapped and PT, there are still vacancies, but only a few personnel are needed. Over half of the IUs reported no vacancies in other areas.

There has been a shortage of SED/BD teachers; however, the problem was not a lack of graduates who could be certified but a shortage of persons with the level of skill and training necessary to teach SED students. The need for bilingual special educators in the urban areas is a new shortage area in the state. Seven out of 22 IUs reported needs for substitutes certified in special education. Unfortunately, districts do not provide the salaries or benefits necessary to draw qualified people. The major problem in hiring personnel is apparently not a lack of qualified people (except in the visually handicapped area, where there are not enough graduates). Rather, hiring problems are related to low salaries and the difficulty of attracting teachers to rural or inner city areas. The projected staff needs for the next five years are in the areas of severely handicapped, autistic, and visually handicapped; all other areas are expected to be stable.

The state has the necessary preservice training programs with the exception of the bilingual area where there is a need for a training program. Current personnel demands are being met in all areas but the visually handicapped. In fact, there is an abundance of special educators throughout most of the state. In the visually handicapped area, there is no need for a new program, but enrollees could be increased in the existing program.

There is a strong need to prepare OTs and PTs to work in public schools, perhaps through providing stipends in return for commitments to work in public schools for a number of years. IHEs also need to consider program revisions to better prepare teachers of SED students. There are real concerns about the lack of skills among these teachers. Finally, IHEs need to look at increasing the supply of teachers of the severely mentally retarded, multiply handicapped and autistic where the projected needs are. In fact, IHEs should align their preservice training efforts more with the state's annual needs assessments. The needs

have not changed much, but the training programs have not reflected the needs.

Puerto Rico

The most pressing shortages are in the related services areas — OTs, PTs, speech/language specialists, and educational psychologists. Puerto Rico also has a shortage of teachers of the severely handicapped. There are not oversupplies, but there are sufficient numbers of teachers of the mildly handicapped and teachers of the visually impaired.

Preservice programs are missing in OT, PT, speech and severely handicapped. The medical school prepares the related services personnel, but these graduates do not want to work in public schools and prefer private practice. The SEA is talking to the universities about starting a program in the severe area, as well as a program for educational psychologists; currently, programs train only clinical psychologists. With the exception of these areas, there are enough graduates to meet the personnel needs. There are three university programs, in addition to a number of satellite courses provided by New York University. Overall, the number of graduates is increasing.

Rhode Island

Most areas are oversupplied. There may be a small shortage in the speech/language area and in OT and PT, but higher education is meeting the needs for personnel. Moreover, there is not much turnover among teachers of the mildly handicapped.

The state is still missing training programs in OT and PT, and these therapists are usually hired from Massachusetts or Connecticut. The state recently implemented a new preservice program in adaptive physical education and one in vocational education. Programs and enrollments have been stable. The real concern is with the lack of practical experience among these graduates.

South Carolina

There is a statewide demand for teachers of the emotionally handicapped and hearing handicapped, and consistent shortages are reported for OT, PT, and orientation and mobility instructors. Based on incidence projections, the state is anticipating oversupply of teachers in MR and LD but per-

sonnel shortages in all other areas. At present, preservice training programs are meeting the basic manpower needs.

South Dakota

There are unfilled positions, especially in OT; there are shortages in PT, SED, and severely and multiply handicapped. Preservice programs and enrollments have remained fairly stable. SED teachers are recruited from out of state because resource room people trained locally do not have the necessary skills.

Tennessee

The shortages of personnel are no worse than in 1982–83, but the state is still short of teachers with skills in emotional disturbance and severe multiply handicapped and certified personnel in the area of the visually handicapped. These shortages are widespread across the state. A general shortage of OTs and PTs is also reported. In the cities, there are some small surpluses of teachers with the special education endorsement. Some districts arrange to send surplus teachers to outlying areas for a couple of years with the agreement of a position in the urban area later.

There are plenty of teachers with the special education certification permitting them to teach SED and multiply handicapped students, but there are not enough people with the actual skills. The state is meeting with IHEs and the Deans to develop a plan to address this. The state is also planning a summer stipend program to enhance the skills of people working toward special education endorsement but planning to teach the SED. To alleviate shortages in the area of the visually handicapped, the state has paid summer stipends for teacher training leading toward certification in this area. Some personnel trained through this program now serve as consultants to counties surrounding their place of employment and, on contract to districts, provide services in assessment, selection of equipment, etc. In general, contracting for services is increasing as districts become more knowledgeable about services and begin looking for OTs and PTs.

The colleges and universities are probably turning out enough graduates in most specialty areas, but there is a problem getting adequate manpower in rural areas. The state is working with some of the IHEs to get inservice/outreach services into the rural districts where the major shortages exist.

Texas

Personnel shortages are not as great as before, partly because of the influx of new population into the state. There are fewer unfilled positions than in previous years, but new hires include a number of out-of-state people. The greatest shortages are in SED, visually handicapped, secondary special education and vocational special needs (although the new school reform bill deemphasizes vocational education and may eliminate many of these programs). In the case of secondary special education, teachers with elementary certificates are allowed to teach the older students.

South Texas mounted a VI-D recruitment project three years ago and established a recruitment base for the region. This program has been very successful in reducing the shortages in rural areas and has expanded to other areas. In this program, recent graduates from the state's five largest training programs are computer matched to available positions and sent information on openings. The program was so successful that it was expanded to out-of-state job candidates; information about the position and the state of Texas is sent to prospective job applicants. A number of out-of-state graduates have applied. While the program has attracted a number of people to rural areas, there are still oversupplies of some teachers in metropolitan areas. For instance, in Austin and Dallas, special education teachers are working as aides.

Texas has completely revamped the undergraduate certificate and will revise graduate certification in 1986. The state did not succeed in getting certification in bilingual special education. This is a major unmet training need, although there are a number of bilingual special education projects in the state, including a new one at Pan American University.

Utah

There are shortages in all areas, and the SED/BD area is critical. Other severe shortages include teachers of the visually impaired ("impossible to find"), communication disorders/speech therapists, OTs and PTs. Each school year districts are about 100 teachers short, and the state typically issues about 45–50 authorizations a year for non-certified people. Shortages are statewide, and not limited to rural areas. There are 25 open positions for OTs and PTs,

but these are very difficult to fill because such personnel frequently do not want to work in public schools. Consequently, the state is providing inservice training to classroom teachers so they can provide OT and PT services.

All preservice training programs include a resource credential, and there is discussion of starting a program in autism. The University of Utah recently got a grant to provide training in the area of transition of school-to-work. The great preservice need is for regular educators who work with handicapped students. About 82 percent of the handicapped spend a major portion of their day in the regular classroom, yet the teachers have minimal training. The state is trying to establish certification requirements for these teachers, but the Deans are said to "keep hiding behind" the National Council on Accreditation of Teacher Education (NCATE) standards.

Vermont

The state has personnel shortages in multiply handicapped and speech/language. The latter is a consistent shortage area because of the turnover; many speech/language personnel do not want to work in public schools. The state is putting scholarship money into both areas. There is a surplus of resource room teachers, a certification category that also includes self-contained classrooms for the mentally retarded. This is a bachelor's level certification. Many of the graduates are dual majors in elementary and special education, but have difficulty getting hired in special education jobs because they lack experience. Typically, they work as aides and return for the Master's degree before entering special education jobs.

Virginia

There are consistent shortages in LD, SED, and preschool handicapped teachers across the state. Rural areas have more difficulty in attracting people. A number of districts are providing financial incentives to get local teachers endorsed in special education. A few shortages are reported in speech/language, hearing impaired, and educable mentally retarded; licensed OTs and PTs are also in short supply. The state has no surpluses of special education personnel.

Virginia had the full range of preservice training programs; however, the University of Virginia dropped its program in visually handicapped, but it is expected to be picked up by some IHE. There are several new endorsement programs across the state in LD and preschool handicapped and one new severely handicapped training program. However, there has been a slight decrease in the number of new graduates. Several institutions have begun to conduct training in local districts instead of making teachers come to them. Cooperative arrangements are being developed between districts and IHEs. Programs at Old Dominion University and Lynchburg College are two very positive initiatives.

Along with the new endorsement requirements, the state has a contract with one of the IHEs to refine the competencies for special educators. Both IHEs and districts can use these competencies to evaluate new personnel and develop inservice training.

Virgin Islands

Teacher recruitment is ongoing. The shortages are not as severe as they once were, but they are still serious in the specialty areas of speech/language, OT, PT, LD, MH and severe ED. The need has lessened in the areas of the mildly handicapped; these positions can now be filled more readily. However, turnover of personnel remains a major problem. Most people only stay about three years, so positions are always opening up.

The Virgin Islands has no preservice training program in visually handicapped or hearing handicapped, but there are enough applicants for these positions. Since the speech/language personnel typically do not accept jobs in public schools, and many leave the islands, there are shortages. The College of the Virgin Islands has a Master's degree program in the area of the mildly handicapped for training resource room teachers. The program is being evaluated currently to see if it is meeting the needs for personnel. At present, the vast majority of personnel come from the mainland.

Washington

There is a shortage of secondary-level teachers that is fairly widespread, and there are severe shortages in rural

areas. An oversupply of teachers of the mildly handicapped is reported in the urban areas.

West Virginia

The state requests counties to submit data on both shortages and vacancies, but there is a great deal of discrepancy between the two sets of figures. Out of 55 counties, 32 reported shortages in behavior disorders, but only five reported vacancies. In effect, "shortage" means the county has a "hard time identifying people." The state has over 1,000 people on emergency certificates; this represents one third of special education personnel in the state. There is a real shortage of trained people. The greatest need is in the area of LD, followed by mental retardation and behavior disorders. Shortages are also reported in visually impaired, hearing impaired, and speech/language. The latter area is a problem because the state standards parallel ASHA's, and trained personnel typically do not choose work in the public schools.

Only two IHEs have speech/language training programs and one is full time only, which means that personnel with emergency certificates cannot pick up additional training on a part-time basis.

The state does not have preservice programs in vision or hearing but does have contracts with Vanderbilt University to run a six-week course at the School for the Deaf-Blind in Nashville, Tennessee, and districts send teachers there for training. There is the same arrangement with Western Maryland College for the teachers of the hearing impaired. At West Virginia University, there is a new program in the severely and profoundly handicapped. Marshall University has just been approved for a program in behavioral disorders, including autism (this is a new endorsement area also). Most of the state's IHEs are projecting some increase in special education graduates, with the largest increase in the area of emotional disturbance. Enrollments are expected to increase as well.

Wisconsin

A great need for teachers of the emotionally disturbed is reported. Programs for these students are expanding, but districts are not getting the teachers. The need for teachers of the mentally retarded is decreasing, and there may be surpluses of these teachers, but many are getting

endorsed in other areas. Finding speech/language people has been a consistent problem. The need in LD is leveling off, and supply and demand are stable in vision and hearing. As in other states, there are more problems in rural areas. No substantial changes in the number of preservice programs have taken place.

Wyoming

The major shortage areas in the state are PT and OT (in rural areas only), transition, secondary vocational education and educational diagnosticians. There is a concern about personnel in the areas of the sensory handicaps, but the issue is one of quality rather than quantity. More personnel would be needed to work with the deaf if so many children were not served in the Wyoming School for the Deaf. Slight oversupplies of personnel are reported in Casper and Cheyenne; most of these surplus personnel are social workers.

The supply of new personnel in the state is decreasing. There is only one university, and it has lost its Master's and summer programs because of federal cutbacks. It now has only four faculty members. Wyoming can recruit from other states because salaries are relatively high ($20,000–$40,000 in some districts). However, the SEA itself has a recruitment problem, having lost half of its four-person staff because of low salaries. The state education leadership earns less than the teachers, and salaries have been frozen since 1982.

Chapter 3

THE PROGRAMMATIC CONTEXT

Manpower supply is clearly related to the way states organize and deliver services. While lack of qualified personnel can constrict program growth and impair program quality, so changes in programs or placements can affect the need for personnel. This chapter presents an overview of the major programmatic changes that jurisdictions faced at the time of the follow-up survey. Included among these program issues are:

- Class size and student/teacher ratios
- Cooperative arrangements and interagency agreements
- Contracting for services
- Deinstitutionalization and out-of-district placements
- Definitions and eligibilty
- Multicategorical programming
- Program features
- Least restrictive environment
- Rural and remote programs
- Prevailing programmatic needs

The intent of the chapter is to provide a comprehensive overview of program initiatives and trends in programming among jurisdictions. Of specific interest are those program features that impinge on manpower supply and demand.

Student/Teacher Ratios

Respondents were asked about current regulations governing student/teacher ratios, as well as increases or decreases in class size. Table 5 presents the current update on state regulations and ratios. As the table shows, 14 jurisdictions have no formal statewide regulations governing class size or case load. In 37 jurisdictions there are regulations or standards, but deviations from these regulations are permitted.

Only five jurisdictions have regulations that permit no deviation from established class size or case load. In all but

Table 5. Mechanisms for Requesting Exceptions to Student/Teacher Ratios

	No Formal Regulations	Reviewed or Pending	Requests to Deviate Allowed	No Deviations
Alabama			X	
Alaska	X	X		
Arizona	X			
Arkansas			X	
California			X	
Colorado			X	
Connecticut			X	
Delaware			X	
Florida	X			
Georgia			X	
Hawaii			X	
Idaho			X	
Illinois		X	X	
Indiana	X			
Iowa			X	
Kansas			X	
Kentucky			X	
Louisiana				X
Maine			X	
Maryland				X
Massachusetts			X	
Michigan			X	
Minnesota			X	
Mississippi			X	
Missouri			X	
Montana			X	
Nebraska			X	
Nevada			X	
New Hampshire			X	
New Jersey			X	
New Mexico			X	
New York			X	
North Carolina			X	
North Dakota			X	
Ohio			N/A don't need	
Oklahoma			X	
Oregon	X			
Pennsylvania		X		
Rhode Island				X
South Carolina				X
South Dakota	X			
Tennessee	X			
Texas	X	X		
Utah			X	
Vermont	X			
Virginia			X	
Washington	X			
West Virginia		X	X	
Wisconsin			X	
Wyoming	X			
Guam			X	
Puerto Rico			X	
BIA	X			
Dist. of Columbia	X			
N. Marianas			X	
American Samoa	X			
Virgin Islands				X
TOTAL	14	5	36	5

two of the jurisdictions allowing deviations, districts are required to apply to the State Department of Education for a waiver, citing reasons for the request. In those states that reimburse local districts by some formula involving class units, waivers for classes below the mandated size must also be approved.

Concern over class size was not as acute as in 1982, but 12 states did report some overloads or "larger-than-preferred classes," and no state reported decreases. In California, Colorado, New Mexico, and Oregon, the increased class sizes in individual districts were attributed to economic conditions pressing districts to stretch classes in order to reduce costs. In Oregon, for example, there are locally determined ratios and some resource rooms are reported at 85 to 1. An Oregon respondent stated: "The loads are horrendous. This [presence of high ratios] is more predominant outside of metropolitan areas, but the squeeze is on there as well. There is less of a problem in small districts with fewer children. One way to stretch money is to extend the student/teacher ratios."

In Colorado, districts are reimbursed for a certain number of staff through the use of a staff approval formula. This formula, along with general budget decreases and increases in numbers of handicapped students, has resulted in overloads in some districts. Utah sees overloads as a result of personnel shortages and of limited resources to teach a rapidly expanding number of school age children. New Mexico, by contrast, attributes large class sizes to "poor planning" on the part of some districts; they fill classes to the maximum in September even though they know referrals and admissions to special education will increase enrollment during the school year. The result is requests for waivers in class sizes during the school year.

Five states (Florida, Georgia, Iowa, Kentucky, and Wisconsin) reported that requests to increase class sizes had increased, and that these were directly related to shortages of special education teachers. In Kentucky, over 54 percent of the districts had applied for waivers to exceed maximum sizes in 1984. Iowa reported getting many requests for rule exceptions, including increasing class size and mixing disabilities, due to lack of teachers. It was noted: "The fewer the number of rule exceptions requested, the more the number of temporary certifications is increased.

If districts cannot handle difficulties by class load exceptions, they do it with temporary certifications." Finally, Indiana and Oklahoma reproted that class sizes had increased, but the reasons included programmatic changes resulting in increased use of resource rooms and mainstreaming, with concomitant increases in the student/teacher ratios for these classes.

Increased class loads for the mildly handicapped and for special education students in part-time programs emerged as a major trend among states. Most waivers appear to be granted for these types of programs. In addition, among those states that recently enacted or are considering regulatory changes for student/teacher ratios, changes have included increases in resource room loads, decreases in class size for more severe handicaps, and slight case load reductions for speech/language.

Louisiana raised the maximum number of students in resource rooms from 23 to 27, in part "to help large population areas so they can get by with a reduced supply of teachers." Illinois recently completed a large study of all special education mandates, including ratios, and decided to leave class size ratios as originally developed and allow districts to request deviation if desired. The opposite may occur in Texas, as a result of the new ratios included in the proposed education reform bill. Instructional arrangements are now weighted to correspond with the intensity of instruction. With this provision in force, funding for special education appears to favor placement in self-contained classes or in regular education classes, rather than in resource rooms.

Tennessee developed a best practices manual that includes policies and procedures for operation of programs. Class sizes and case loads are suggested. The manuals present 10 service options. Class sizes are to be determined by the amount of time a student receives an option. These student/teacher ratios are only suggested; Tennessee does not have any formal case load regulations, nor does it require local districts to request permission to increase suggested ratios.

There appears to be as little consensus in policy or practice regarding student/teacher ratios as there was in the 1982 study. There is no evidence that there are better data nor improved rationales supporting current policies. Only Louisiana reported that its revisions had come about

after both study and broad-based comment from parents, trainers, and program administrators. What is clear is that ratios are still being adjusted to accommodate both manpower shortages and economic constraints, and the impact on program quality is unknown.

Cooperative Arrangements and Interagency Agreements

Local cooperatives and multisystem arrangements continue in almost all of the states with relatively little change occurring during the past four years. States have organized a variety of cooperatives, regional programs or interlocals to respond to service needs of special education students. In some states, such as Oregon, there are both intermediate units and regional service units, the latter organized to provide programs for low incidence handicaps such as the deaf-blind. In Wisconsin, regional service units conduct needs assessments and provide instructional materials and support. In most states there is no indication of dissatisfaction with the existing arrangements, although a few of the comprehensive service units, those organized for regular and special education, have been reorganized for administrative efficiency. In general, states report that the use of local cooperatives helps local districts meet manpower needs, as well as share program costs. Yet when economic and personnel problems are not at issue, local districts choose to move away from cooperative arrangements and prefer to "own" their own personnel.

In preparation for compliance with Public Law 94-142, New Mexico's State Board of Education directed the State Department of Education to begin a participatory planning process. In doing so, the State Board emphasized the need to place the maximum attention on children and to develop a participatory process that addresses smaller districts. The ensuing plans have included regional consolidated applications to the State Department, in which groups of districts will elect to join together in providing services for the handicapped, with incentives from discretionary monies.

Interagency Cooperation

Many jurisdictions are currently negotiating interagency agreements between Special Education and a variety of other

agencies, including Vocational Education, Vocational Rehabilitation, Developmental Disabilities, Health and Welfare, Human Resources, Mental Health, and Mental Retardation. Some of this interagency effort has been difficult because, as agencies have experienced fiscal cutbacks in recent years, they have correspondingly reduced their service commitments and have tended to withdraw somewhat from collaboration with special education. While progress is indeed reported, the development of interagency relationships is, for many jurisdictions, "a constant struggle."

Interagency goals reported in the follow-up study include: creating common definitions and procedures across agencies; ensuring that clients are not lost as they pass between agencies; developing statewide tracking systems to follow clients served by multiple agencies; creating a central source for directing service; improving community living and community service options; providing educational opportunities for delinquent and incarcerated youth; and improving secondary and postsecondary vocational services available for handicapped youth.

Substantial progress in development of interagency agreements since 1982 was reported by: Alabama, Alaska, California, Delaware, the District of Columbia, Guam, Illinois, Louisiana, Michigan, Montana, Nevada, New Jersey, New Mexico, New York, Ohio, Oregon, South Carolina, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin (N=24).

Some examples of interagency projects in the jurisdictions are described below:

Professionals at the Kentucky Department of Education are working with the Univeristy of Kentucky, which is training personnel in outdoor/environment education for the handicapped, through a cooperative arrangement with the Department of Parks and Recreation. In Michigan, discretionary dollars are used to fund three $30,000 per year positions for persons called Planner-Monitor-Coordinators of special education activities in three state agencies: the Department of Social Work, the Department of Corrections, and the Department of Mental Health.

Through New Hampshire's Comprehensive System of Personnel Development, an interagency committee has been formed to work at the state level. Member agencies include Special Education, Vocational Rehabilition, Develop-

mental Disabilities, Health, and Welfare. Joint training across agencies is planned, as well as a conference on comprehensive services and transition, with particular emphasis on the development of better cooperation regarding services for the severely handicapped.

In New Mexico, a new program developed through interagency agreement with the Department of Vocational Rehabilitation (DVR) is targeting one district in each of the state's regions. Through this program, a special educator, a vocational educator, a regular counselor, and a DVR counselor form a team. Pretesting reveals participants' knowledge of one another's roles; then they work together to bring policies and practices into closer correspondence. For special education teachers who participate on such a team for a specified number of hours, the DVR provides a summer internship to further strengthen skills and interagency cooperation.

Ohio's Governor has established an Interagency Task Force on the Handicapped because he was concerned about some children and youth not meeting the criteria of any one agency and consequently losing services. An interagency agreement has been executed at the state level, and the following state agencies have adopted administrative rules: education, human services, mental health, youth services, mental retardation and developmental disabilities, and health. The Governor has also mandated county or local cluster meetings and appointed a committee of his cabinet members to implement a uniform budgetary approach to interagency coordination.

Contracting for Services

Hiring personnel on a fee-for-service basis continues in almost all jurisdictions, specifically in the related services area where districts are prevented from hiring their own people by personnel shortages and sometimes by economics. Every state and educational jurisdiction reported that most of their districts are contracting for OT and PT services, a situation that is unchanged from the previous survey.

Contracting for speech and language services has shown some increase, however, during the past four years. Some respondents attributed this increase to the new ASHA standards and the fact that fewer and fewer speech

therapists are choosing to work in local schools. Again, however, the issue appears to be economic; public school salaries are not competitive with other agencies, private clinics or private practice. In many states, school districts contract with local hospitals for the speech and language personnel, and there is concern about the lack of experience these personnel have with children.

Another practice noted by several states (Indiana, Montana and Utah) was some increase in contracting for psychologists who can do educational diagnoses and psychological assessments. Additional personnel have been needed because of increased referrals and long waiting lists. SEA representatives were somewhat dubious about the experience levels of the contracted psychologists.

Wyoming reported that its state legislature has reduced by 15 percent the amount that can be spent to contract for services. California reported a decrease in contracting for services, and districts are beginning to hire their own personnel, primarily because of compliance issues regarding appropriate services. While districts prefer having their own related services personnel, it is still much more economical to contract for these services.

Clearly, contracting for services is one of the major means used by districts to meet personnel shortages among the related service providers. However, there is some evidence that the high prevalence of contracting is not due solely to the exigencies of manpower shortages. Contracting for services in smaller districts, particularly those with fewer severely handicapped and other low incidence students, is considered more cost-effective than hiring full-time personnel. At the same time, there is concern over the qualifications of these contracted personnel.

Deinstitutionalization and Out-of-District Placements

Consistent with data from the Annual Reports to Congress and other sources, almost every state reported increases in the numbers of students returning to local schools from institutions or other residential placements. As a result, local school programs for severely and multiply handicapped students have expanded and the numbers of group homes and other community-based living arrangements have increased. The handful of states reporting no

such increase stated that the majority of their students had already returned before the last survey.

The reductions in out-of-district placements in residential schools have resulted in increased numbers of seriously emotionally disturbed students returning to local communities. Shortages of supervised living arrangements as well as educational programs for these students was noted by almost a third of the states, and this lack of services has been exacerbated by shortages of qualified personnel. These students pose particular problems for many districts since this population has typically been served outside of the local school districts (see Grosenick & Huntze, 1982). In an effort to initiate programs for these students, states and local districts are developing more interagency agreements and ad hoc arrangements with Mental Health. However, solving this problems appears to require more than dealing with personnel shortages. As one interviewee, stated, "We need program models . . . we need to know what type of community situation is most workable, and we need creative public school programs."

Among the many jurisdictions reporting deinstitutionalization initiatives was Illinois, which previously had one of the highest rates in the nation for private placements. Now students are being brought out of private placements and special schools, and the largest group affected has been behaviorally disordered adolescents. The state has been able to stimulate new programs for these students with P.L. 94-142 discretionary funds. In Maryland, a new program at Western Maryland University trains "aftercare givers" to work with deinstitutionalized populations and as liaisons with community agencies, services, and public schools.

Although Montana continues to have a relatively high rate of out-of-state placements of handicapped students, a new Developmental Disabilities program in specialized family training is keeping some very severely handicapped students in the community. New group living and foster home services are emerging from this program. Nevada has decreased its out-of-state placements markedly. The previous total of 40 students placed out of the state is now down to 10. In cases where students were out of state because of parental decisions, the State Department is assisting in foster home placements, as necessary. In Utah too, institutionalization is

decreasing rapidly. Through cooperation between the State Department of Education, Developmental Disabilities, and Social Services, group homes and community centers are being established, and school districts are working hard to provide appropriate programs.

Definitions and Eligibility

The 1982 survey did not attempt to elicit specific information on classification systems and eligibility criteria for special education, although some information on these topics was obtained. The follow-up survey did, however, ask respondents to describe changes in eligibility criteria that had occurred in the past three to four years.

More than half of the jurisdictions surveyed reported recent changes, either pending or enacted, in definitions of handicapping conditions, eligibility criteria, or categories of service. A reportedly significant factor in these changes is the federal influence with regard to the disproportionate numbers of students identified as learning disabled.

In addition to the changes noted below, other jurisdictional actions are being contemplated. For example, Georgia has implemented a new funding system for education, including the education of severely handicapped students. In Alaska, there has been discussion of whether all students currently identified as emotionally disturbed belong in that category. Moreover, in many jurisdictions where changes are not reported, inservice training and technical assistance provided to regular education often have the outcome of reducing the number of students referred to special education.

By and large, the changes in definition that are occurring are leading to a reduction in (1) the number of students classified as learning disabled, and (2) the total number of students eligible for special education and related services.

Changes in Definitions, Eligibility Criteria, and Service Categories

A total of 31 jurisdictions reported that changes were pending or had been accomplished with respect to definitions, eligibility criteria, or categories of service, as follows:

Alabama reported that eligilibility criteria for learning dissabilities had been tightened, and that the IQ score cutoff point for educable mental retardation had lowered from 75 to 70.

Arizona has changed its definition of "homebound." Formerly, this category required physician certification that the student would be out of school for three continuous months; the new rule allows homebound classification for any student who will be out of school for a total of three months over the school year. The change allows more instruction for asthmatics and medically fragile children who are in and out of medical care frequently.

Colorado developed a more restrictive definition of learning disability in 1983.

District of Columbia has approved new guidelines for defining learning disability eligibility.

Georgia has refined the category of learning disability, and is now using the American Association of Mental Deficiency (AAMD) definition of mental retardation.

Hawaii has replaced its former category of "severely emotionally disturbed" with a new category called "emotionally handicapped." Autistic students, formerly subsumed under the "severely emotionally disturbed" category, are now categorized as "other health impaired/autistic." New eligibility criteria for learning disabled, which place greater emphasis on degree of discrepancy and an "exclusionary clause," are currently being field tested prior to adoption.

In Indiana, the categories of emotionally handicapped and learning disabled are being reviewed with respect to eligibility criteria used for program placement.

Iowa has reclassified "emotionally disturbed" and "chronically disruptive" students; they are now included in "behavior disorders."

Kansas has developed a formula for identification of learning disability that gives districts a way to get "harder data." The state is also working on new guidelines for identification of emotional disturbance.

Louisiana has changed its "severe emotional disturbance" nomenclature to "behavior disorders" and has tightened its criteria for "learning disabled" and for speech disorders.

Maryland's Least Restrictive Environment Project has the mission of establishing uniform policies and pro-

cedures for the implementation of educational programs in the least restrictive environment; this project includes the piloting of a variety of programmatic and administrative activities throughout the state. Maryland also has a Learning Disabilities Project aimed at assisting school systems in identifying and implementing quality practices to improve both diagnosis and instruction.

Michigan has a new autism category as of 1983, and the state is currently proposing to revise eligibility rules for hearing impaired, visually impaired and severely multiply impaired.

Minnesota is working on identification criteria in a number of handicapping areas and is endeavoring to make the learning disability category more realistic.

Missouri has changed the eligibility criteria for learning disability in an attempt to curtail the increasing incidence rate.

Nebraska has changed its "emotional disturbance" category to "behavior impairment."

Nevada is supporting a task force of special educators and school psychologists to address issues in identification of learning disabled students.

New Jersey is examining its diagnostic procedures for the learning disability categories of "perceptual impairment" and "neurological impairment" to see whether such students could be served by other regular education programs, such as compensatory education.

New Mexico has reclassified its learning disabled population according to new regulations. Of the reclassified students, approximately a third were declassified and moved to regular education; approximately a third were reclassified as "communication disordered;" and approximately 20 to 25 percent were reclassified as "behaviorally disordered." The remainder were reclassified in other categories.

North Carolina has new eligibility criteria for specific learning disabilities and the behaviorally/emotionally handicapped categories.

Oregon has a new autism category.

Puerto Rico has received assistance from the South Atlantic Regional Resource Center to examine critiera because of its high population in the category of mental retardation and its fairly high population in the category of

learning disabilities. Puerto Rico will establish more specific eligibility criteria.

Rhode Island is implementing on a pilot basis new eligibility criteria for the learning disability category.

Tennessee removed its "learning problems" and "social maladjustment" categories by changes in the state law in 1981.

Texas, as mandated by new rules, has a task force examining the learning disability definition and another task force examining the definition of emotional disturbance.

Utah has enacted legislation based on a totally new concept, for which pilot data are being collected. By this change in state law, districts would be paid according to the amount of *service* provided to a student; this system eliminates the need for categorical prevalence figures. The state currently pays for up to 18 percent of its student population to receive special education services. Under the new plan being tested, the amount per student would be determined by the Individualized Education Plan (IEP) and by the type and intensity of service needed. The IEP would determine both service delivery and state funding. Although districts would have to do additional work to obtain funds, the new system should provide the legislature with evidence that handicapped students do cost more — sometimes a great deal more — than nonhandicapped students. (The Utah concept is similar to that reported for South Dakota in the original survey. South Dakota's funding is not based on units; rather, the IEP becomes the special education program, and whatever it calls for is an allowable cost. The state reimburses half of all allowable costs, so districts receive 50 percent of whatever they spend locally, while federal funds are used to build programs and supplement services.)

Vermont had a change in the identification of learning impaired (mentally retarded and learning disabled students) in 1982. Previously, a student could be identified for special education if he or she was performing at 50 percent below grade level; now a discrepancy formula is applied and a handicap must be demonstrated.

Washington has new eligibility requirements for learning disability, as well as a new definition for a category called "developmental handicap," which included sensory impaired, health impaired, and deaf-blind students.

West Virginia has added criteria and clarification for the identification of handicapped students but has not had a major overhaul.

For the 31 jurisdictions that reported actual or pending changes in definitions, eligibility criteria, or categories of service, the frequency with which particular handicaps are being addressed is shown below.

Number of Jurisdictions Reporting Changes of Population in Identification Eligibility, or Categories

Learning disabled	23
Emotionally disturbed	8
Mentally retarded	5
Behaviorally disordered	4
Autistic	3
Speech impaired	1
Physically handicapped	1
Hearing impaired	1
Sensory impaired (not specified)	1
Health impaired	2
Deaf-blind	1
Homebound	1

(Note: the total is greater than 31 because some jurisdictions' efforts are directed toward more than one population. Those whose efforts are distributed across the whole range of identification and eligibility issues are not included in this tally.)

Multicategorical Programming

Pupils with varying types of handcaps are often grouped together for instruction, most commonly in resource rooms, learning labs, interrelated classrooms, or multihandicapped self-contained classrooms. Mildly to moderately handicapped students predominate in this service delivery model, which has the theoretical rationale that students should be grouped

according to instructional characteristics and needs as specified by the Individualized Education Program, regardless of the label that is given to them.

At the time of the 1982 survey, there was growing concern about misuses and abuses of the multicategorical model, apparently stimulated in part by the fiscal problems experienced by jurisdictions during that period. Because of program cutbacks, reductions in force, and other measures for dealing with funding reductions at that time, many districts reportedly wanted more flexibility in programming and placement. Personnel shortages and staffing pattern dilemmas also contributed to the problem. Expansion of multicategorical grouping was one solution at the time, as reported by several jurisdictions.

Now that the fiscal situation in most jurisdictions is more positive, some report fewer concerns with inappropriate multicategorical grouping. Some jurisdictions say that the need for multicategorical programs has declined because there are more programs for learning disabled students than there were three years ago. Nonetheless, many respondents reported growth in the number of students placed in multicategorical instructional settings. This trend appears to be related to the movement of more students of all types into less restrictive environments.

As described earlier, 29 jurisdictions in the follow-up survey use certification practices that are completely or primarily categorical, while the certification practices of 26 jurisdictions are completely or primarily generic or cross-categorical. Even when certification is primarily categorical, students can be placed in multicategorical resource rooms. The information gathered shows that a few jurisdictions make little or no use of multicategorical programming; some use the multicategorical model and have no serious concerns about it. Still others use this model and report problems and abuses in its use. The results incidate that more jurisdictions reported concern about abuses of multicategorical grouping than in the 1982 survey.

Four states—Alabama, Minnesota, North Dakota, and South Carolina—reported a virtual absence of multicategorical arrangements. Certification in these states is completely or primarily categorical, as is resource instruction.

Of the remaining 53 jurisdictions (all of which report limited to extensive multicategorical instruction), 20

reported no serious problems with it. These were: American Samoa, Arkansas, Connecticut, Delaware, the District of Columbia, Florida, Idaho, Louisiana, Massachusetts, Michigan, Nebraska, New Hampshire, New Jersey, Ohio, Rhode Island, Tennessee, Vermont, the Virgin Islands, Washington, and Wyoming.

The 33 other jurisdictions expressed concerns about inappropriate multicategorical grouping of handicapped students. The types of problems identified are listed below; often several problems were identified by one jurisdiction.

- Too many students are assigned to one teacher (for instance, one jurisdiction reported an instance of 85 students weekly to one teacher).
- There is too much diversity in the students placed in one group.
- The model is misused in rural districts to solve staffing problems by indiscriminant and inconsistent mixing of students.
- Students from low-incidence populations are included in groups of more mildly handicapped students.
- Teachers are not qualified for the multiple responsibilities.

Under fiscal pressures, the multicategorical model becomes a convenient way to expand teacher loads and spread resources. Certification policies are associated with misuse of the model. Generalist certification stimulates growth in multicategorical placements; generic teachers' skills are too general, and they cannot successfully operate self-contained classrooms.

Respondents to both the 1982 and follow-up surveys expressed these additional reservations about multicategorical programming as it is being practiced:

- There is considerable doubt as to whether college and university training programs can adequately prepare cross-categorical and multicategorical personnel in four years.
- In some locations, districts can request variances to enlarge the number of handicap categories that can be served in a multicategorical resource room or interrelated class. In such instances, the diversity of handicaps and learning needs in a group can become very

great and may merge low-incidence students with more mildly handicapped students.

- Many professionals question the wisdom of serving emotionally disturbed or behaviorally disordered students in multicategorical settings.
- There is a perceived mismatch between training provided in higher education programs and the manner in which districts program for mildly to moderately handicapped students.
- Resource room teachers often face exorbitant demands, including large case loads and many different preparations for the various students they see in a day or a week.

As described earlier, Maine is moving away from heavy dependence on the resource room model, in favor of more self-contained instruction. Also putting less emphasis on the resource room teacher than in the past, Guam is creating a closer link between regular and special education to provide for the needs of the mildly handicapped and is often employing the self-contained classroom for moderately and severely handicapped students.

In West Virginia, which is currently dealing with this issue, the movement is not away from the resource room *per se*, but away from its multicategorical nature. The West Virginia Board of Education has stated that multicategorical resource rooms "won't exist as of 1987; we just won't have these holding tanks." Iowa is approaching a similar point. In the past, a letter of authorization made it possible for teachers in Iowa to take certain roles, such as multicategorical resource room or multihandicapped self-contained instruction, work experience instruction, teacher consultant, supervision, and educational strategist positions. It is stated: "Now these specialties will be reflected on teaching certificates, and people will have to have two certificates (one at the graduate level) in order to teach in multicategorical programs."

On the other hand, Virginia reported a move to use teachers for both self-contained and resource room groups. A state spokesperson said: "The idea is to remove student/teacher ratios and come up with alternative case loads, and then reimburse districts according to the level of severity in an instructional group."

Program Features

The most prominent areas of new activity since 1982 have occurred in educational services for handicapped children below school age and in secondary and postsecondary services for handicapped students. Increased attention to these two populations has been accompanied by greater involvement of special education with other agencies at the state and local levels. Much of this new activity can be attributed to the stimulus provided by federal funding priorities.

Early Childhood Special Education

A combination of factors is bringing about expansion of services for handicapped infants and young children. State-level initiatives are reported, sometimes as a result of preschool incentive grants or state incentive grants. A few jurisdictions have lowered the age of eligibility for services, and a few have new mandates for preschool programming. There is also a greater focus on early identification of handicapped children, interagency child-find procedures, and statewide tracking systems. State level activity is also starting to be manifested in greater educational opportunities at the local level.

Many unserved preschool children remain to be identified. As more programs become available, many more of these children can be expected to be identified for service. At the same time, many jurisdictions report great difficulty in finding qualified teachers for preschool programs, and emergency certification is prevalent. Preservice teacher education programs in early childhood special education tend to have small enrollments; some either have closed or are threatened because of low enrollments. Thus, current personnel shortages in the early childhood category may be expected to increase.

Progress reported in early childhood opportunties by individual jurisdictions is as follows:

- **New state priority or initiative in early childhood special education:** Alaska, American Samoa, Arkansas, Connecticut, Delaware, Hawaii, Kentucky, Massachusetts, Nevada, New Hampshire, New Jersey, North Carolina, North Dakota, the Northern

Mariana Islands, Ohio, Tennessee, Texas, Vermont, Virginia, the Virgin Islands, and Washington (N=21).

- **New mandatory programming for children in kindergarten or below:** Alabama, Connecticut, Mississippi, Missouri, South Carolina, and Washington (N= 6).
- **Eligible age revised downward:** Montana, New Jersey, and the District of Columbia (N= 3).
- **Some new local program expansion:** Alabama, Arkansas, District of Columbia, Massachusetts, Montana, Oregon, and Tennessee (N=7).

Alabama is working cooperatively with the Alabama Institute for the Deaf-Blind on a project which focuses on the identification of children in this population from birth to age three. Parent training is also included, as well as provision of resources to parents and schools. Maryland has developed an instructional television (ITV) course to help personnel in early childhood education for the handicapped upgrade their skills for serving children from birth to age five.

The Montana Department of Education sponsors a home intervention program for infants. In conjunction with the Developmental Disabilities Division of Social Rehabilitation Services, this program involves parents of children who are deaf-blind, mentally retarded, or physically handicapped in a comprehensive set of services. In Tennessee, the Governor's wife has initiated a state task force, and part of its scope is to develop a high-risk register for young children.

Secondary and Postsecondary Programming

Since 1982, the problem of secondary and postsecondary educational opportunities for handicapped individuals has become paramount, and virtually all jurisdictions report at least one plan to improve and expand services for handicapped adolescents and young adults. Nonetheless, secondary education continues to be described as the weakest link in the special education continuum. As one repondent put it, "Secondary is a big deep hole; we are trying to move it, but progress is very, very slow."

A major obstacle is the serious shortage of qualified people to provide instruction at the secondary level. It is

reported that fewer new graduates are becoming available for secondary positions, and many teachers currently holding secondary special education positions are far from fully qualified and certified. Some jurisdictions experience difficulty in finding persons who can be even temporarily certified.

Further, the preparation of teachers for secondary special education is not altogether satisfactory. First of all, the K-12 training model generally offers little specialization for service in grades 8-12, and few training programs appear to address differences in age levels and curricular areas that typify secondary education. Respondents also emphasized the need for more comprehensive efforts to prepare vocational special educators, for inclusion of more practical experiences in secondary training programs, and for the development of secondary-specific competencies in trainees.

A large proportion of secondary handicapped students are being served in resource rooms, but many respondents believe that little individualization and differentiation are taking place in such settings. Rather, the multicategorical resource room is generally oriented to basic skills remediation and tutorial instruction, with insufficient emphasis on vocational needs and post-school planning. Respondents also acknowledged the need for more intensive development of community job opportunities.

The nature of the secondary school also presents problems. Several respondents spoke about the difficulty of bringing about change in middle schools and high schools and of modifying the course of study to make it appropriate for handicapped students. There is a shared viewpoint on the need for a total revamping of curricula, program options, and preparation of personnel for secondary special education. In addition, there appears to be an unmet need for consulting teachers at the secondary level.

Finally, in some jurisdictions, respondents felt sure that many members of the secondary handicapped population had not been identified because services are so sparse, and that the handicapped dropout rate is needlessly high because programs are inadequate or nonexistent.

In spite of, or because of, this array of problems, the states and territories are taking steps to improve secondary opportunities for handicapped youth. Among these initiatives are:

- **New state initiative or priority in secondary or transition to adult life:** California, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Michigan, Missouri, Nevada, New Hampshire, New Jersey, New York, North Carolina, the Northern Mariana Islands, Ohio, Oregon, Pennsylvania, Utah, the Virgin Islands, Washington, West Virginia, Wisconsin (N=28).
- **Some new local program expansion:** Delaware, the District of Columbia, Georgia, Guam, Illinois, Indiana, Kentucky, Montana, Ohio, Puerto Rico, Vermont (N=11).

California is initiating an Employment Education Project, based on a functional critical skills model and the Deshler and Alley Learning Strategies Model. Interagency work is bringing key people together from special education, bilingual education, and vocational education, with the goal of developing programs based on employability.

The District of Columbia's new secondary program for learning disabled students has an academic orientation, with special education support, and students can earn Carnegie units. The District has also established a program for hearing-impaired youth, aged 18-19, who are leaving Gallaudet College but remain in need of vocational education services. North Carolina has a SEA Coordinator of Services for Transition and Vocational Education and a Coordinator for Technology.

The University of Louisville and the Kentucky Department of Education are working together to provide training to administrators, regular educators, and special educators concerning programming for learning disabled secondary students. The training model is based on the Deshler and Alley model for learning strategies in the middle school.

Many of Michigan's districts or intermediate units now have work-study programs which are helping students to be less dependent adults. Maryland's new instructional television (ITV) training series, now in development, will focus on the school-to-work transition and will have a interdisciplinary audience.

A new Vocational Special Education Coordinator position has been added in Ohio, and more than 100 such posi-

tions have been funded. The intent is to make sure that handicapped adolescents receive appropriate services. Ohio's 104 vocational education planning districts (cooperatives) are required to offer a certain number of programs to all students in grades 10 through 12.

Wisconsin has a cooperative effort between vocational education and special education (and including higher education) at the state and local levels. The objective is to train special educators in vocational education for mildly handicapped students. The original number of 25 sites has increased to approximately 200. A separate mission of this effort is to build relevant content into inservice and preservice programs.

In Idaho, the State Department of Education has led in the development of school-based transition services through a personnel preparation grant. The program has 18 LEA pilot sites, extensive parent participation, and strong interagency collaboration. One of Vermont's priorities is community-based training for secondary students. The objective is a blend between vocational and special education that crosses all severity levels.

The University of Hawaii and the SEA are involved in cooperative planning to provide preservice and inservice training in the area of transition. A new position of Transition Coordinator has been created, and it is anticipated that by 1988 Individual Transition Plans (ITPs) will be implemented for all secondary students.

Secondary Exit Criteria

The District of Columbia's new policy on exit criteria requires school personnel and parents to confer when a child reaches adolescence, in order to decide whether the child should work toward earning a standard diploma or a certificate of Individualized Education Program. The introduction of this process has necessitated considerable inservice and parent training. Florida's RAISE program, intended to raise student achievement at the secondary level in regular education, ultimately will have an impact on special education graduation requirements.

New York has enacted three legislative measures concerning "aging out" of placements. The first measure is for out-of-state placements; when a student reaches age 18,

the parent is notified of the opportunity for the district to send information to other state agencies that might provide a program for adult services before age 21. The second option involves the same procedure for in-state residential students. Third, if students are in special education 100 percent of the day and are living at home, many will need adult services. At the annual review during the school year in which these students reach 15, parents are given the opportunity to have adult services contacts, just as this opportunity is provided for students in residential schools. At present, this is a single-agency (school district) effort at cooperative planning. In addition, a comprehensive effort in New York is merging Special Education, Vocational Education and Vocational Rehabilitation to develop district models that will give older handicapped students a variety of opportunities for postsecondary training. Actions have included revision in curricula, use of vocational education funds, placement of vocational rehabilitation counselors in the schools and intensive inservice training. In New York a graduation certificate has been available for mentally retarded students, but now this certificate has become available to students with other handicaps. If a student stays in school for 13 years after kindergarten and cannot qualify for a diploma, then he or she can receive a local certificate for completion of the Individualized Education Program. Alternatively, the student can remain in school to age 21 and continue to work on the diploma.

Tennessee's handicapped students are now eligible for three kinds of diplomas: a regular academic diploma; a high school certificate (when the student does not pass the proficiency test but acquires the necessary units of credit); or a special education diploma (when the student does not complete the credits or the proficiency test but completes the IEP).

Selected Program Initiatives

As a by-product of survey interviews, a number of constructive practices were described at the state or local level. Some of these new developments are summarized as follows.

Barrier Studies. Special education professionals from Ohio's Department of Education joined with the State

Superintendent's Advisory Council and other groups to identify barriers to achieving quality education for the handicapped, assess the likelihood of resolving barriers in five to ten years, and predict the impact of a given solution on other barriers. The Division of Special Education identified five barriers with a wide impact and published these, along with suggested problem-solving activities, for dissemination to state, intermediate-level, and local agencies. Later, the State Department honored 16 districts for quality performance tasks leading to goals suggested by the barrier study; 20 professional organizations are also being honored.

In the state of Washington, through a cooperative effort in planning and programming, multiple organizations and groups of regular and special educators, administrators, state personnel and others are working with local district teams of approximately 15 persons each. These groups are engaging in identifying barriers to full service for handicapped students; subsequent activities will identify solutions as applied at the local and state levels.

Bilingual Special Education. The Arizona Department of Education is working on special education programming for limited-English-proficient students. The Western Regional Resource Center has collaborated in materials development and in setting up some model programs in communities, and a state sourcebook on bilingual special education is being prepared. California's State Board of Education has allocated $450,000 for bilinugal special education, including renewed personnel training and establishment of model district sites. Hawaii is conducting a collaborative regular education/special education project on bilingual special education and has developed a number of training modules aimed at meeting needs in assessment and program planning.

Parents. As part of New Jersey's focus on parents of handicapped students, a statewide advisory committee has been developed. The mission of the committee and the New Jersey program is eliciting involvement of the state and New Jersey's 21 county jurisdictions. In New York, parents of a handicapped student who reside in the district are mandated members of the multidisciplinary team. In addition, parents have assisted in the development of a

parent information booklet on new state regulations. Parents are also trained to train other parents and to reach uninformed parents concerning their rights and responsibilities under P.L. 94-142.

Ohio is using Part B administrative funds for a partnership project that trains parents and principals together. While the initial conception of why training is needed is that parents and principals may have a natural adversarial relationship, the State Department believes that these groups can work together very productively. Pennsylvania has for several years made parent partnerships a statewide priority. Through joint Part D projects with the State Department, parents have created training manuals and materials and are engaged in training of trainers across the state. Hawaii has established the Special Parent Information Network (SPIN), a hotline for parents needing information on services, resources and training opportunities.

In the current parent effort known as Parents in Partnership with Educators, parents have created a list of "Special Education Quality Indicators" and will soon begin reviewing local special education programs by these criteria. The "Special Education Quality Indicators" are viewed as the vehicle for entrenching local partnerships begun in the previous "Parent-to-Parent" initiative.

School Effectiveness. Nebraska's statewide school effectiveness program is approaching school improvement "from the bottom up" (rather than from the top down, as many have done in response to the call for reform). The Mid-Continent Regional Educational Laboratory is working with the state to train at least one person in each educational service unit on the principles and practice of school assessment and school effectiveness, as well as curriculum issues. This is a massive effort to apply the learnings of a decade of school effectiveness research to regular education and to special education. A commonality in this process is collaboration, where local groups work together on professional growth activities.

In Guam, the Blueprint for Excellence program of alternative learning paths offer more diversified options for low-performing students within regular education, especially at the secondary level. This program is aimed at increasing school effectiveness; it also reduces to an extent the need for special education.

Severely Handicapped Services. Alaska Resources for the Moderately and Severely Impaired is a non-profit agency that in 1982 was awarded a major contract by the State of Alaska to deliver training, technical assistance, and instruction to schools in Alaska's hard-to-reach bush villages. Staff members, deployed by small plane, dogsled and other means, have reached several hundreds of handicapped children in these villages, many of them Eskimo, Indian, or Aleut. Still more children are being identified and served as the work of the project continues.

The Albuquerque (New Mexico) Public Schools' Side-by-Side Program for severely handicapped has expanded in the past several years. This program fully integrates severely handicapped students with nonhandicapped students in public schools.

Support for Teachers. Hawaii offers ongoing inservice training to teachers and supports personnel statewide on a year-round basis through Project Ho'okoho.

Technologies. Delaware's computer technology program has had good support from both the public and private sectors. In the summer of 1984, the Easter Seal Society, IBM, and the Departments of Education in Maryland and Delaware brought severely handicapped children and youth to a summer camp in Maryland for computer learning. IBM assisted in modifying terminals so that handicapped students could have full access to the computers.

In Maryland, an educational technology network has been developed to implement a system that will foster the equitable distribution of computer hardware and software and other emerging technologies and improve instruction and instructional support for all children in Maryland's public schools. A national foundation has also offered the Maryland State Department of Education over 2,500 microcomputers for use by special educations students. The computers will be used by students and teachers in classrooms across the state.

Recently, Maryland's State Department of Education signed an agreement with the Johns Hopkins University to establish the Center for Technology in Human Disabilities. The primary purpose of the center will be to promote the development and use of microcomputer and other technological advances for the benefit of people with disabilities

in home, school, job and community. The center will conduct research and evaluation studies, provide training programs for human services professionals, deliver services to disabled people and disseminate information about technological innovations that benefit disabled people.

A major focus of Montana's technology program is enabling handicapped students along several dimensions. The State Department has funded a pilot project for learning disabled students, with emphasis on using a word processor to develop reading and writing skills. A project for severely handicapped students has incorporated a single-switch input device with the computer, so that students can communicate with teachers and peers, often for the first time in their lives. Montana's Department of Education is also working to connect the State Corrections Division's special education directors and directors of corrections facilities via SpecialNet, and then to link them with the school districts through this medium; electronic mail is expected to make transmission of records more streamlined.

In Nevada, Clark County has a state-supported project called The Special Educator in Computer-Assisted Instruction, which focuses on practical ways to use computrs in instruction and includes research on matching software with types of handicapped students. Through computer sharing, this program is available to all districts in Nevada.

Pennsylvania reports a multi-faceted technology initiative through its special education resource centers. The State Department awards mini-grants to teachers in order to introduce technology into the classroom and support innovative centers. Hawaii has developed a state-supported project for training teachers in the use of computer-assisted instruction and computerized IEP development.

Visual Handicaps. Because Indiana has no preservice preparation program in visual handicaps, the state has taken various steps to provide summer training. A series of visually handicapped courses for graduate credit, offered by a "visiting professor" from out-of-state, enables teachers currently teaching visually impaired students on emergency certification to become fully licensed.

In Vermont students in the mainstream are served by generic special educators with consultation and mobility training provided by the Vermont Association for the

Blind. Those in need of self-contained placements are in residential, out-of-state placements.

Least Restrictive Environment and Placement in Regular Education

The increasing assignment of mildly to moderately handicapped students into regular classrooms for some or all of the school day, as described in the report of the 1982 survey, subsequently emerged in a greater number of jurisdictions and is now an established pattern. A major contributing factor is reported to be the federal emphasis ("the pressure for LRE is constantly there").

Funding is another factor. As one respondent stated, "Fiscal fluctuations provide the excuse to put special education in a different mode in districts." The movement of children from resource rooms to regular education, or from self-contained programs to resource rooms for greater portions of time, will generally expand the number of students per teacher and is therefore less expensive. Changes in state funding formulas can also influence placement. For instance, Wyoming has discontinued counting students (via average daily attendance data) as its method for establishing fiscal allocations. Because students in Wyoming may now be eligible for services without being "pulled out," this change in the fiscal system has tended to increase time spent in regular education.

State legislation also influences the LRE movement, as in the situation in Texas in 1986. A Texas respondent said:

> "The education reform bill (H.B. 72) is basically a funding and curriculum bill. It includes a new base salary for teachers, and there is one standard curriculum with a multitude of essential elements for all kids. Special education students would tie into that. Funding based on the number of contact hours generated by various instructional arrangements provides the special education state foundation. Although some few programs have benefitted from this new funding mechanism, it is apparent that the majority of programs will be attempting to serve more handicapped students within regular education."

Some spokespersons express a lack of confidence in the movement toward regular education. They express doubt as to the rationales and influences that are bringing about the movement into regular classrooms. Respondents in the states also voice concern as to the capacity of regular education, as it is currently constructed, to teach handicapped students, and they describe problems in communication and interaction between disciplines. Finally, spokespersons in the states point to the lack of criteria and capacity for monitoring regular education placements.

Directions in Regular Education Placement

Among the 57 jurisdictions included in the current study, 47 reported a greater emphasis than in 1982 on placing mildly to moderately handicapped students in regular education for some portion of the school day. Student numbers vary but can be quite high. For example, 87 percent of North Carolina's mildly to moderately handicapped student and 82 percent of Utah's are in regular classrooms for a significant portion of the school day. In most jurisdictions, movement into the regular classroom is most common for learning disabled students, but also includes educable mentally retarded and behaviorally disordered students, as well as some with health or sensory impairments and other problems. Alabama sees an increasing need for a more cooperative relationship between regular and special education. The "slow learners" in particular are the population whose needs are great.

Six jurisdictions have not increased placement in regular education since 1982: Florida, Mississippi, Nevada, New Mexico, Rhode Island, and Vermont.

Two jurisdictions question the nationwide movement toward regular education as the least restrictive environment for mildly to moderately handicapped students. These are the same jurisdictions that took this position in 1982 — Maine and Guam.

In 1982, the Maine respondent stated:

> "It is a difficult position to train categorical people and then place them into a noncategorical resource room. We are moving back to a more

> self-contained program with capable people. A move to more self-contained instruction will not be easy because of costs, which are always an issue when it comes to self-contained classes. And there will probably to be some conflict with advocacy groups that push for least restrictive environment."

This point of view was reiterated in the follow-up:

> "Maine is stepping back from mainstreaming handicapped students in regular education, and other alternatives are being developed. There are fewer handicapped students in regular education in Maine today than there were in 1982."

In Guam, a similar doubt about regular education placement was voiced, both in 1982 and in the follow-up. In the 1982 survey it was noted:

> "As we implemented resource rooms in regular schools, at first the kids were in the resource rooms 50 percent of the day. Eventually, they spend more time in the resource room. This year, we have re-established some self-contained classes and expect more next year. The resource room teacher can't deal with both mild and moderate handicaps at the same time. There is no increase in the number of kids per teacher, but there is pressure from resource room teachers who know that too many kids are moving in and out too rapidly."

In the follow-up, a Guam respondent reported:

> "A five-year analysis of service delivery modes for handicapped students shows that types of services are changing. Kids who were initially placed in a resource room less than 50 percent of the day — after one or two years, these kids end up spending *more* then 50 percent of their time in the resource room. This is definitely tied to the progression through the grades, and it is more depen-

dent on reading ability than on any other single variable. It is also tied to the whole general problem of low-performing students. For the majority, their whole reason for being in the resource room is their non-success in the regular program. So it makes no sense to change their placement to regular education. There is an inability to effect change in regular education programs. With each advancing grade, regular education teachers are more committed to teaching subjects, not kids. We need to take a closer look at regular education's real ability in the long run to respond to low-functioning kids."

It was also noted that in Guam:

"Handicapped kids are moving into more self-contained environments; this is a trend here. Part of it is made up of kids who are not succeeding in resource rooms (Even if they are there 100 percent of the school day). The trend is to re-establish more self-contained classrooms for moderately and severely handicapped students."

Support for Teachers

A majority of respondents to both surveys cited these problems: a lack of communication between regular educators in the schools; and a lack of teacher skills in interdisciplinary teaming, group processes, and other aspects of interprofessional relationships. When interaction is so strongly indicated by the influx of handicapped students into regular education, it is reasonable to assume that this problem becomes acute. Consequently, ten jurisdictions reported a strong interest in the teacher consultation model or variations of the teacher assistance team model as a source of support for regular teachers, as well as for special education personnel. (It should be noted that these are not the only jurisdictions where teacher consultation and assistance team activities are being implemented; in fact, these concepts are beginning to spread.) The eleven jurisdictions reporting this emphasis are:

- American Samoa is moving to a consultant teacher model. The proposed plan would utilize outstanding

regular and special education teachers to work with other special education teachers.

- Colorado reports that both general education and special education are working toward the development of an integrated service provision model.
- Guam has placed new emphasis on increased support for existing resource room teachers and has added new positions to provide program development and classroom support for special education.
- In Hawaii, a number of teachers have been hired to pilot a consultant role in the schools. Depending on the model adopted, teachers trained to provide collaborative support are expected to assume new roles in 1992.
- Maryland is exploring the use of specialists as consultants and the use of teacher assistance teams.
- Minnesota has conducted statewide leadership training on teacher assistance teams.
- New Hampshire now has separate certification for special education consulting teachers and is in need of service delivery models to go with it; the need for effective consultation systems is particularly pressing at the secondary level.
- Since 1978, North Carolina has been creating and extending the functions and the state network of building-based staff support teams in its public schools.
- North Dakota's state office is encouraging districts to establish assistance team models and other building-based resources.
- Vermont's school districts have for more than a decade relied on the consulting teacher model and on consulting teachers prepared principally by the University of Vermont and St. Michael's College.
- Washington reports new emphasis on the consulting teacher model and considerable district training. In some Washington districts, this role in curriculum decisions and case management is carried out by the school psychologist, who may carry the student through from assessment to teacher assistance in the classroom.

Teacher consultation or assistance teams cannot be regarded as the single, final solution for placement of handicapped students in regular education, despite the popularity of these models. As one state spokesperson stated: "General education and special education want

these models. One special education teacher is supposed to be a god, with a caseload of up to 50 and 75. They do this to cut the staff and spread the money, but it exaggerates an impossible situation."

Rural and Remote Programs

The report of the 1982 survey did not include a specific section on education of handicapped students in rural and remote settings; instead, it subsumed this information within overall topical issues. However, because respondents' comments on rural and remote special education in the follow-up survey contribute so much to an understanding of the important issues in this area, it is presented as a separate topic in this report.

Rural and remote districts generally experience the same problems as many urban and suburban districts; they simply experience them in a more acute and persistent form. Alarming attrition rates, questionable student/teacher ratios, recruitment problems, personnel shortages, emergency certification, and various "band-aid" approaches were reported in 1982. Four years later these problems have certainly not been solved. Nor would anyone contend that rural and remote districts generally enjoy a full continuum of services for handicapped students. Some jurisdictions, including Alabama, the Bureau of Indian Affairs, Colorado, Florida, Indiana, Kentucky, Minnesota, Mississippi, Nevada, Oklahoma, South Carolina, South Dakota and Washington, continue to experience extreme difficulties with personnel and students, and other problems. In Pennsylvania, several IHE, Part D funded efforts are assisting the state to acquire PT and VI educators in rural areas.

At the same time, there do appear to be differences between the situation reported in 1982 and the situation reported in 1986. These difficulties are partly a function of the general improvement in many jurisdictions' fiscal status and the restoration of funds that were previously threatened or actually reduced. Another source of the changes since 1982 has been pressure at the federal level. In addition, the respondents themselves have had time to assess and reflect, and they may have come to see the situation differently.

The rest of this section is intended to present these viewpoints from the jurisdictions. It is not intended to be a comprehensive discussion of the range of issues in rural and remote education. Nor is the presentation of these viewpoints intended to make an extremely complex situation sound simple. Against the background of continued struggles to provide services in rural and remote settings, these are simply some new insights that have emerged.

Rural and Remote Personnel Shortages

It continues to be generally more difficult for rural and remote school districts to recruit and retain personnel than it is for urban and suburban districts. Further, both surveys found that the most pronounced shortage areas in rural and remote districts (as well as other districts) occur in the related services, primarily in occupational therapy, physical therapy, and speech therapy, with somewhat smaller shortages of school psychologists and social workers. Job preferences in the therapy fields are influenced by higher salary alternatives, as well as by the attraction of working in urban-centered agencies. These factors are particularly strong in occupational and physical therapy. As a result, solutions to the difficulties in recruiting and retaining related services personnel are not expected to be rapid. At the same time, progress in interagency coordination, negotiations by cooperatives, and the continued use of contracts for services (not always a cost-effective option) appear to be providing relief in some areas.

Moreover, some alternatives that were new in 1982 have proven to be workable since that time. For example, Alaska's statewide system for delivering services to low-incidence students also imparts various necessary skills to teachers and parents in the remote reaches of the state.

Apart from related services shortages, the rural personnel picture looks somewhat better than in the 1982 survey, though the problem of supply and demand is far from solved. Jurisdictions like California, New Mexico, and Utah are quick to point out that current shortages apply equally to rural and urban districts. These three states, along with Colorado, report that their need to issue emergency teaching certificates is now no more prevalent in rural than in non-rural areas. This situation suggests a

greater overall limitation in available personnel. Respondents noted several other factors may be influencing rural special education.

Improved recruitment practices. As noted earlier, Texas is one state that reports a greatly improved ability to hire special education personnel in rural districts, due in large measure to a recruitment base established three years ago by its Region I Education Service Center. This program has been so successful that it has expanded its operations to other areas of the state. There are also reports of better advertising by districts and states and of greater affiliation between districts and universities for purposes of recruiting new graduates.

Training of permanent rural personnel. Increased attention to personnel preparation strategies oriented to rural positions has also been productive in some regions. In Arizona, for example, a new federally funded project at Northern Arizona University brings resident professionals in from rural and remote districts for Master's training in needed service skills and then returns them to their home communities to take new positions. In other regions, higher education faculties are taking such training into the districts.

The Montana spokesperson pointed out that teachers in rural and remote areas are more likely to remain there if they receive additional on-site training. Thus, Montana relies heavily on the Rural Education Center at Western Montana University to provide rural Master's level training for practicing teachers and administrators. Most other jurisdictions are equally concerned with continuing professional development of personnel in rural and remote areas. Although the delivery of inservice training is impeded when long distances, bad weather, and rugged terrain are involved, future uses of technologies to address these problems are viewed with some hope.

Displacement of personnel and other factors. Findings of the 1982 survey suggested an "index of unrest," as one respondent described it. Due to reductions in force in jurisdictions hardest hit by the economic downturns of the early 1980s, teachers in fairly large numbers relocated to distances of up to several thousand miles in order to gain

employment. Texas has been beneficiary of this fluctuation in the professional population, as has New Mexico.

With respect to related services personnel as well, New Mexico reports improvement: "In terms of ancillary personnel (e.g., speech, occupational therapy, physical therapy, others), 12 percent of our needs were unmet in 1981–82, but this was down to about eight percent unmet needs in 1983, and down to about six percent unmet needs for 1984. These improvements have been caused by some additional professionals coming into the state, by more efficient bookkeeping in the use of the complicated formula for deployment of ancillary personnel, and by better advertising."

Salaries in Rural and Remote Areas

Still another factor clearly suggested in the follow-up survey is the relationship of salary incentives to recruitment and retention of personnel in rural and remote areas. Rural and remote districts often have less money than their urban counterparts; accordingly, their teachers' salaries are often lower. A 1984 study by the Rural Education Association revealed that the average salary of rural district teachers is $4,125 (or 20.2 percent) below the salary level for public school teachers nationwide.

The importance of salary in recruitment and retention is demonstrated by spokespersons from Alaska and Wyoming. Alaska has the highest teacher salary levels across the states and territories, and Alaska does not experience personnel shortages. The state receives more than enough applications in all areas of education, and the need for emergency certification or waiver of authorization is virtually nonexistent. In earlier years, Alaska did experience some difficulties in finding personnel for instruction of low-incidence populations of handicapped students, but the success of its statewide low-incidence service delivery model (Alaska Resources for the Moderately to Severely Impaired, initiated in 1982) has been helping to solve these problems. The Alaska spokesperson believes that "the only incentive needed for recruiting teachers is money — even in the bush country."

Even though Wyoming is a highly rural/remote state with many areas that might be considered "undesirable" by new teachers, the state has little trouble recruiting per-

sonnel for special education. In fact, it draws teachers from several other states. Teachers' salaries vary across the state, and in some districts they are quite high. For instance: "One district starts a new bachelor's level teacher at $20,200, and the pay goes up to a maximum of $37,000 or $38,000; in some districts, the maximum is more than $40,000." The respondents from Wyoming see the ability to deploy people to rural and remote areas as closely tied to these pay rates: "We don't feel that more specialization in teacher training for rural service would be very helpful; it is the money."

Still another jurisdiction reports: "We are finding that we have enough money to give handicapped kids an appropriate education — if the money is spent where it should be spent, and not on cases of the superintendent's salary coming out of it and things like that. Earmarked funds should be used for their intended purposes. If all the money went where it should, there would be fewer problems. In rural areas, they are spending handicapped funds for superintendents and others who already get a legislated salary — and we don't have the financial auditing/monitoring capacity to stay on top of that."

Low-Incidence Handicaps in Rural and Remote Areas

The most difficult personnel problems in many rural and remote districts involve personnel to serve students with low-incidence handicaps (severely retarded, multiply handicapped, deaf, blind, deaf-blind). One prevailing solution is to educate these students in regional centers sponsored by educational cooperatives. This approach means busing, sometimes over long distances, as noted in the 1982 survey. An alternative is employing itinerant specialists or, using a system like the one Alaska uses — a massive, intensive, and regularly scheduled deployment of specialists into all populated areas of the state to deliver services and train parents and teachers.

While it appears that the population of severely handicapped children and youth has not yet been fully identified, particularly in rural and remote areas, it is also true that institutionalization and out-of-state placements are gradually diminishing, even in such predominantly rural/remote states as Colorado and Nevada. Local services are ap-

parently expanding for these students, at least to some degree. To the extent that they are educated in a self-contained group or interrelated classroom in a cooperative regional center, this many not be interpreted as the least restrictive environment. However, as the respondents from Colorado and New Mexico point out, the least restrictive and the most enabling environment are not always the same. For instance, there may be only one severely retarded child within a very sparsely populated area where the few residents are spread over 100 miles. For such a child, the setting that might be labeled more "restrictive" may actually be more enabling through greater stimulation, greater interaction, and more intensive interventions.

Class Loads and Grouping for Instruction in Rural and Remote Areas

Utah is one of the jurisdictions where personnel shortages and fiscal difficulties continue to create overloaded classes. Utah's spokesperson emphasized that overloads are not occurring solely in rural areas, but occur everywhere. Oregon's respondent noted that student/teacher ratios are more equitable in rural and remote districts because the student population is smaller. In New Mexico, class overloads are viewed partly as a problem in administrative planning. Some districts begin a school year with maximum case loads; as special education enrollments increase, they must exceed the recommended ratios.

With regard to multicategorical grouping, the North Carolina respondent voiced the view of many in stating that "Many school units, particularly rural units, have no option but to serve students in multicategorical programs." Multicategorical groups are often assembled in rural and remote districts in order to combine the three or four handicapped students in their entire geographical area into one instructional group. In the earlier discussion of concern about inappropriate grouping of this nature, it was noted that 31 jurisdictions expressed such misgivings. Only six of these jurisdictions, however, stated that "the model is misused to solve staffing problems in rural contexts."

Administrative procedures to deal with grouping may be set up more easily in some jurisdictions than in others. In Nebraska, when a district has fewer than the prescribed

number of handicapped students per teacher, the district may request an exception in order to receive full funding for less than a full complement of students. Louisiana's new regulations have made a new type of placement available for hearing impaired, visually impaired, and severely language-disordered students. It is a combination of self-contained and resource room placement, in which the students are served by a single teacher, but move in and out of the class according to need. According to Louisiana's representative: "This was done for the rural parishes where there weren't enough kids for a class. Busing to other districts was very costly, and kids were being placed in more restrictive settings. These classes are more prevalent in rural parishes and they seem to be working."

In Washington, where the situation is more difficult, districts concerned about funding one teacher for a small number of handicapped students are submitting proposals to review the situation with the State Department of Education and find solutions that are both fiscally and educationally sound.

Teacher Preparation for Rural and Remote Areas

In many states, particularly those west of the Mississippi River, even multicategorical grouping is not the solution for small districts in very sparsely populated areas. In these districts it is not uncommon to find one, two-or three-room schools where a dozen or so students in grades 1 to 8 are the responsibility of one or two teachers. Such multigrade instruction may also include one or more mildly to moderately handicapped students. These circumstances are quite well known to Nevada's alliance of rural district superintendents. In their view, the need is not for greater categorization of students and specialization of teachers but, rather, for what have been termed "competent generalists" (a descriptor said to have been coined by the American Association of School Administrators). These superintendents' concept of a competent generalist is a general education teacher with skills in curricular sequencing across grades, in direct instruction and incremental learning, in individualized instruction, in responding to varying individual learning styles, in cross-age grouping of children for instruction, in planning and managing multi-

ple activities, and in using problem-solving approaches to working with children.

The multigrade remote school is essentially a situation in which all children must receive individualized instruction geared to their grade levels, learning styles and rates, and other characteristics of the student and the setting. The instructional skills of the competent generalist are considered essential not only for rural and remote schools but for good instruction anywhere; these teaching skills are judged to benefit both handicapped and non-handicapped students. With such instruction in all classrooms, fewer children would fail in regular education and fewer children would have to be labled as handicapped. Multicategorical resource rooms or interrelated classes are the preferred placement for handicapped students, but the same instructional principles should be integral to the repertoires of all instructional personnel.

Several jurisdictions responding to the follow-up survey agree:

- **South Dakota.** "The old country schoolteacher would solve some rural problems — a regular classroom teacher with lots of curricular knowledge, individualization, a good programmer. If we had some of that, we would have good results."
- **Montana.** "We need more competent regular education generalists with good skills in the multiple demands that go with the small school, and we need more strategically placed specialists. some districts are releasing their best people to go to other districts to provide training and assistance to other teachers. But there is reluctance, and districts cannot afford much of it. This kind of training should happen at the preservice level."
- **Wyoming.** "What Wyoming needs for its rural and remote schools is what is described as the competent generalist. This person should have some understandings of special education, but this is not the paramount concern, because dealing with different learning styles and problems and grade levels, individualization, and the other hallmarks of special education are actually the requirements of all instruction in the truly rural/remote setting."
- **Nebraska.** "I would suggest more focus on regular education teachers so that they would be able to deal with

the variety of handicapped and nonhandicapped kids they would be teaching in rural districts. We need competent generalists for special *and* regular education in remote schools."

As a variation on this theme, two other jurisdictions report the desirability of placing a special education teacher in the rural regular classroom. In small remote schools in Oregon, special educators move into regular classroom positions from time to time, usually with consultant assistance. In Alaska, it is reported: "There are a number of districts with a few handicapped students, and they often put a special education teacher in the regular classroom to teach the whole class of maybe 20 nonhandicapped kids and two handicapped kids, with an aide."

As to the qualification of current regular education personnel, however, the respondents indicated that teachers with the skills described above are far too rare. Indeed, it may be that the skills of the competent generalist, though initially shaped in teacher training, must be more fully developed in rural service.

The relationship of actual experience to attainment of polished skills is the other major issue here. In both the original and follow-up survey, a recurring suggestion for improving preservice teacher education programs was to extend, invigorate, upgrade the practicum portion of training.

A relevant practicum is particularly important when trainees are expected to take positions in rural or remote settings. Trainees need not just the professional experience of performing very demanding work and of becoming socialized into the profession, but also the personal experience of the "ruralness" or "remoteness." In particular, many respondents in both surveys suggested that people must master the sense of isolation and realize the compensations and adjustments that may be necessary in the absence of features of everyday life that are taken for granted in metropolitan areas. These dimensions of the rural setting are frequently cited as deterring teachers from accepting or staying in positions in remote and rural areas. Thus, it is concluded that a lengthy, meaningful, and realistic practicum at a rural or remote site should be a prerequisite for potential rural teachers. Further, it is suggested that the practicum be preceded by visits, observations, teacher exchanges, social in-

teractions, and other experiences to orient trainees to the nature of this career option and to help them to feel capable on the job and comfortable in the community. If teacher training institutions should find that not all rural sites are suitable for standard practicum requirements, trainees could be given two practicum experiences, one of which involves them thoroughly in all aspects of living and working in a rural or remote area.

National Agendas for Rural and Remote Areas

The federal position has brought greater attention to the fact that rural and remote districts have characteristics and constraints that differ from those of city districts (although some would question the notion that rural areas present dramatically different sets of personalities, values, and cultural anomalies). For the most part, it is also acknowledged that the federal government has played a positive role in stimulating development of infant, preschool, and adolescent programming and encouraging interagency activity, the results of which may be trickling down into some rural and remote areas. However, there is a perception that national policymakers may have adopted blanket perceptions about states, territories, districts, teachers, and children. As the Arizona spokesperson expressed it: "Rural Arizona is not like rural Georgia, but they think that everyone is supposed to do the same thing."

Prevailing Programmatic Needs

Respondents participating in the follow-up survey identified predominant needs within their own jurisdictions. The prevailing needs presented in this section are of a programmatic nature, as opposed to problems and needs pertaining primarily to personnel supply, demand, preparation, certification and development, all of which are discussed in other sections of this report.

As the following displays show, by far the most prominent programmatic need is in the area of secondary and postsecondary education for handicapped youth, which was identified repeatedly as the most undeveloped area of special education. Another area of growing concern is the need for assessing program quality and teacher effectiveness.

Secondary and postsecondary programming, which includes the recruitment of qualified personnel, was cited as a pressing need by the following jurisdictions (N=31):

Alabama	**Michigan**
Alaska	**Montana**
Arizona	**Nebraska**
California	**Nevada**
Colorado	**New Hampshire**
Connecticut	**New York**
Delaware	**North Carolina**
Florida	**North Dakota**
Georgia	**Northern Mariana Islands**
Guam	**Oregon**
Hawaii	**South Dakota**
Idaho	**Texas**
Illinois	**Virgin Islands**
Indiana	**West Virginia**
Iowa	**Wyoming**
Louisiana	

Assessment of program quality, effectivenes, and efficiency (and/or teacher effectiveness) were cited as major needs by the following (N=12):

Indiana	**Rhode Island**
Kansas	**South Dakota**
Kentucky	**Tennessee**
Maryland	**Texas**
Minnesota	**Utah**
North Carolina	**Virginia**

Kentucky expressed this concern: "We need to reassess our overall goals and objectives for special education and be sure that regulations and preparation programs are designed to accomplish those goals and objectives." A Tennessee respondent reported that the state "has come a long way in evaluation, and therefore we are ready to get into the quality of programs for students." In Texas, the spokesperson believes that "evaluation of teacher qualifications has to be highly supportive and has to have more and more flexibility." Program quality and ef-

fectiveness are becoming a priority in Idaho at both the SEA and LEA levels. Virginia sees a need to "develop standards and put our efforts into program design and evaluation; monitoring has reached its optimum purpose."

Interagency cooperation was cited as a prominent need in these states (N=9):

Alabama
Delaware
District of Columbia
Nevada
South Carolina
South Dakota
Utah
Virginia
Washington

Delaware's concern is focused particularly on psychiatric services for emotionally disturbed adolescents, while Washington and Utah report a need to determine the agencies that are responsible for service, particularly for severely behaviorally disordered students.

Early childhood services for the handicapped are identified as pressing needs in these jurisdictions (N=5):

Guam
Kansas
Massachusetts
New Hampshire
New Mexico

Issues surrounding programming for emotionally disturbed and/or behaviorally disordered students include needs for programming and/or establishment of lines of authority in these states (N=4):

Indiana
New Hampshire
Oregon
Vermont

More programming for students in low-incidence populations is a stated need in (N=4):

Colorado
Mississippi
North Dakota
Utah

Bilingual/bicultural programming for handicapped students is perceived as a need in (N=4):

Hawaii
New Mexico
Texas
Virgin Islands

Review and/or reform of certification policies are cited by (N=2):

Florida
Pennsylvania

A greater degree of internal monitoring in school districts is desired by (N=2):

Kansas
Oklahoma

Special education services for incarcerated youth is a need in (N=2):

Hawaii
New York

Other needs were described as predominant in one state each (N=6):

- Review and/or revision of the funding system (Florida);
- District consolidation or the need for more cooperative services (Missouri);
- Development of comprehensive special education curricula (Virgin Islands);

- Revision/promulgation of jurisdiction rules and regulations for special education (Virgin Islands);
- Solutions associated with declassification of students and movement into regular education (Alabama); and
- Stronger partnerships between parents and professionals (Pennsylvania).

In addition, the spokespersons from Wyoming voiced their perceptions that concern for handicapped individuals' rights and potentials is ebbing, and that education is being viewed as a social program.

It is evident that availability of manpower is a major determinant of program development. For example, consistent shortages of certain types of personnel, such as related service providers, have resulted in a general national trend of contracting — providing occupational and physical therapy on a fee-for-service basis. There are problems inherent in this system, particularly that lack of training and experience of many of the contract personnel with handicapped children, as well as with public school programs. Often the result is fragmented or irrelevant services.

Despite the general shortages of instructional personnel, programs were expanded in a number of areas. Major expansions had occurred in early childhood and at the secondary level, particularly as part of the new transition initiative. Another frequent area of concern for jurisdictions was the increasing numbers of students being identified as mildly handicapped, primarily learning disabled. In response, states were imposing new, more stringent criteria on identification of these students. Perhaps the most consistent programmatic feature revealed was the general expansion that was occurring at the time of the follow-up, in contrast with the retrenchment and program reduction that characterized jurisdictions in 1982.

References

Grosenick, J., & Huntze, S. (1982). *National needs analysis analysis in behavior disorders.* Columbia, MO: University of Missouri, Department of Special Education.

Chapter 4

INSERVICE TRAINING

This chapter examines the responses to questions regarding the nature of the inservice training offered by states and other jurisdictions. Specific interview questions sought information on current inservice priorities within a state, in terms of both topics and participants. In addition, information on funding of inservice training and models or approaches is presented. Finally, issues and trends in the delivery of inservice are identified and discussed.

The provision of inservice training has traditionally been one of the functions of state education agencies. Of course, one of the reasons for inservice training is the need to maintain the quality of personnel currently teaching in local schools. Within special education, inservice training has also served the purpose of retraining or "retooling" teachers from one discipline, such as regular education, so they will be qualified to teach handicapped students. In addition, special education inservice training has involved a major commitment to the training of regular educators who are responsible for instructing handicapped students in the mainstream. As recently as the 1982 survey, however, special education inservice training has taken on the additional focus of upgrading or supplementing training of new personnel entering the profession. New topical areas have been developed in response to deficits in the quantity or quality of available personnel and have not necessarily represented staff development or enhancement in the traditional sense. This chapter will attempt to provide some insight into the underlying structure of the inservice training that is going on within the states, as well as identify the major issues confronting those who deliver inservice.

Inservice Priorities

Inservice priorities within the jurisdictions are dictated by needs assessment data. In some cases, these data

are collected and summarized at the level of the jurisdiction; in other instances, they are gathered on an entirely local basis and differ substantially from one local school district to another. The accuracy of the needs assessment data, specifically with respect to long-range planning, is highly dependent on the process by which a jurisdiction determines need. The processes vary from direct survey of local school districts to the SEA examining available data (such as the results of compliance monitoring, data on personnel shortages, and "informal" reports of manpower shortages or skill deficits from program directors).

No wide-scale changes were reported in the ways that jurisdictions identify inservice training needs. However, there was a slight trend towards the use of more local needs assessments and manpower planning. For example, Arkansas and New Jersey both reported that their regional cooperatives now collect needs assessment data and select inservice priorities, while Virginia and Montana have begun to rely on local district data. While this dimension was not specifically addressed in the interviews, there did appear to be a slight but definite move toward states relinquishing to the local areas some of the manpower planning and inservice training functions.

Topical Content

A primary question in the interviews was the major topical areas that jurisdictions would address in their inservice training activities. Table 6 lists the areas identified by jurisdiction.* The three most frequently specified topics were Least Restrictive Environment (N=36); Vocational Strategies (N=33); and Parent and Community Involvement (N=31). This set of highly ranked topics represents some change from the 1982 survey when the most frequently named topics were Least Restrictive Environment (N=43); general special education instruction (N=24); skills for teaching the severely handicapped (N=24); and IEP development (N=21).

*The Key for abbreviations in Table 6 is provided following the table.

The rankings provide some indication of the manpower needs among states, as well as the service delivery issues that continue to confront the public schools. The issue of integrating the handicapped students in the regular education environment continues to be a major focus within LEAs and still requires inservicing of both regular and special educators. If, however, the number of jurisdictions reporting this need constitutes a barometer of change, then there may be improvement in the skills and attitudes of the teachers who must make integration work. The majority of the jurisdictions that reported LRE as an inservice priority indicated that it pertained to all handicapped students regardless of severity. However, several jurisdictions did note that the focus of the training had moved to the more severe populations and attempts to establish integrated classrooms and community-based instruction.

Perhaps the biggest change in service delivery emphases are the rankings of vocational strategies and secondary curricula and instruction as topics for inservice (N=28). In the first survey, the topic of vocational strategies was ranked eighth, and the topic of secondary instruction and curricula was not noted. The increased number of jurisdictions reporting these topics as major priorities was most frequently attributed to the transition initiative and to recently enacted state regulations establishing new graduation criteria that include mandatory secondary curricula.

Despite its drop in the rankings, IEP development remained a topic of importance. In 1986, 19 jurisdictions reported IEPs as a priority for inservice as compared to 21 jurisdictions in 1982. Yet, representatives from 12 jurisdictions volunteered that both regular and special educators in their districts were now considered to be sufficiently skilled in writing IEPs, as well as in general compliance and procedural matters, and that there was limited need for further inservice training in these areas. Some changes in topic frequency, such as behavior management, program evaluation, and early childhood instructional development, appear to reflect a move toward jurisdictions using inservice to address more substantive instructional issues, as opposed to using inservice to "patch up" teachers' skills and provide minimal technical skills in topics such as due process.

Table 6. Inservice Priorities: Topical Content*

	Law enforcement	Narcotics	Juvenile delinquency	Child abuse	Gangs	Crisis intervention	Spouse abuse	Stress	Community relations	Supervision	Traffic	Civil rights	Use of force	Domestic disputes	Criminal law	Ethics	Hostage negotiations	Sudden infant death
Alabama	X	X		X		X			X							X		
Alaska								X										
Arizona				X														X
Arkansas	X		X	X			X	X	X	X			X					
California	X	X	X	X	X	X	X	X	X			X	X		X			
Colorado						X		X										
Connecticut	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X
Delaware	X	X		X	X		X		X	X	X	X			X		X	X
Florida	X	X		X	X	X		X	X	X	X	X			X	X	X	X
Georgia	X	X		X			X				X		X	X				X
Hawaii	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
Idaho	X	X	X	X	X	X	X	X			X	X	X	X		X		
Illinois	X	X	X	X		X			X	X		X			X		X	X
Indiana	X		X	X	X	X		X			X	X						
Iowa	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kansas	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X
Kentucky	X		X		X			X	X	X		X				X		
Louisiana		X			X			X	X									
Maine	X	X	X	X	X	X			X	X		X		X		X	X	
Maryland	X	X							X		X				X		X	X
Massachusetts		X				X	X	X		X								
Michigan		X	X		X		X		X	X	X	X	X	X	X	X		
Minnesota	X		X			X			X	X	X	X		X	X			
Mississippi										X			X			X		
Missouri		X	X	X	X	X	X	X	X	X	X			X	X		X	X
Montana		X	X		X							X			X			
Nebraska	X		X		X	X			X									
Nevada		X	X		X		X				X		X		X			
New Hampshire	X	X	X	X	X	X		X		X	X	X		X	X		X	
New Jersey	X	X	X	X		X	X				X							
New Mexico	X	X		X	X	X	X			X		X	X	X				X
New York		X			X	X					X		X		X			
North Carolina	X	X	X	X	X	X	X	X	X	X	X		X					
North Dakota		X	X		X													
Ohio	X	X		X										X				
Oklahoma	X																	
Oregon		X		X	X					X								
Pennsylvania	X																	
Rhode Island	X	X	X	X	X	X											X	
South Carolina	X		X															
South Dakota	X	X	X	X		X	X				X			X	X			X
Tennessee			X	X	X	X	X	X	X	X	X	X	X	X		X	X	
Texas		X									X							
Utah	X	X	X	X	X	X	X							X			X	
Vermont		X	X		X	X	X	X	X	X		X	X		X	X	X	X
Virginia	X		X							X								
Washington	X							X										
West Virginia	X		X		X		X		X				X					
Wisconsin	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Wyoming			X		X								X	X		X		
Guam	X						X	X										
Puerto Rico				X				X										
BIA	X						X											
Dist. of Columbia																		
N. Marianas													X					
American Samoa													X					
Virgin Islands	X																	
TOTAL	36	33	31	28	28	27	24	23	23	23	21	20	19	18	18	15	15	15

*The Key for abbreviations in this table is provided below.

Table 6. (continued). Inservice Priorities: Topical Content*

	Tech	CSPD	Nonbias system	Leg rules	Curric. school effic.	Mod	Accts	Mgmt. monitor	Instr. change	Soc. skills	Personal safeguards	Imp. learners	Community school	Acct.	Res.	Mainst. devel.	Adult school sys.
Alabama																	
Alaska																	
Arizona																	
Arkansas			X	X		X		X									
California	X	X	X		X					X		X					
Colorado	X																
Connecticut		X	X	X						X			X		X		
Delaware								X						X			
Florida	X	X	X					X									
Georgia	X	X	X	X													
Hawaii			X	X	X		X		X	X	X			X	X	X	
Idaho		X			X					X	X		X				
Illinois						X											
Indiana		X					X										
Iowa		X	X	X	X	X	X	X	X	X	X						
Kansas	X	X	X	X			X	X			X		X				X
Kentucky	X													X	X		
Louisiana			X														
Maine		X				X			X			X	X	X	X		
Maryland	X								X			X					
Massachusetts																	
Michigan		X	X	X	X	X	X	X	X		X	X					
Minnesota					X											X	
Mississippi						X		X									
Missouri			X			X		X	X					X			
Montana	X																
Nebraska		X			X				X	X		X					
Nevada						X	X									X	
New Hampshire		X		X		X									X		
New Jersey				X													
New Mexico			X	X													
New York				X													
North Carolina							X										
North Dakota	X																
Ohio																	
Oklahoma																	
Oregon	X																
Pennsylvania																	
Rhode Island			X		X												
South Carolina																	
South Dakota		X				X	X		X		X			X			
Tennessee		X			X			X					X				
Texas												X	X				
Utah	X				X		X		X	X	X	X					
Vermont					X					X							
Virginia						X											
Washington																	
West Virginia																	
Wisconsin	X			X			X			X	X						
Wyoming																	
Guam																	
Puerto Rico																	
BIA																	
Dist. of Columbia	X																
N. Marianas																	
American Samoa																	
Virgin Islands	X							X									
TOTAL	14	14	13	12	11	11	10	10	9	9	8	7	6	6	5	3	1

*The Key for abbreviations in this table is provided below.

Table 6. Key: Inservice: Topical Content

LRE/mainst	Least restrictive environment/mainstreaming
Voc trg	Vocational training
Parent/commun	Parent/community involvement
Behav mgmt	Behavior management
Sec ed	Secondary education
Consult w/reg ed	Consultation with regular education
Sp ed instr topics	Special education instructional topics
SPH	Severely & profoundly handicapped
LD iden curr	Learning disabilities identification/curriculum development
Screen/ass/diag	Screening/assessment/diagnosis
Interagency	Interagency cooperation
Class mgmt	Classroom management
IEP	Individual education plan
Due proc	Due process
EC/infant	Early childhood/infant development
Pupil eval	Pupil evaluation
Program eval	Program evaluation
Speech-lang strats	Speech-language strategies
Tech	Technology
CSPD	Comprehensive service personnel development
Nonbias assess	Nonbiased assessment
Leg rules	Legislation/new regulations
Curric/school effec	Curriculum/school effectiveness
Med	Medication
Mgmt/monitor	Management/monitoring
Instr change	Instructional change
Soc skills	Social skills
Proced safegds	Procedural safeguards
Imp inserv	Improving inservice training
Commun/coord	Communication/coordination
Aut	Autism
Rec	Recreation
Motor devel	Motor development
Adult educ instr	Adult Education instruction

Inservice Participants

Table 7 indicates the participants who are being targeted for inservice training within the jurisdictions.* Of all personnel categories, regular educators were identified as the top inservice priority by the largest number of jurisdictions (N=49). The next highest priority was parents or surrogates, who were targeted for inservice by 39 jurisdictions. Next ranked were all general special educators (N=37) followed by administrators, both special and regular, (N=30) and vocational educators (N=24). These numbers represent little change from the 1982 survey in which the inservice priorities were, in rank order: 1) regular educators (N=45); 2) administrators and personnel who work with the severely handicapped, each cited by 25 jurisdictions; 3) general special educators (N=23); and 4) vocational educators (N=21).

Inservice for regular educators represents a long-term commitment for 49 jurisdictions, reflecting the ongoing need to prepare regular education personnel to work with handicapped students in the mainstream. Most of the content of the training for these personnel continued to focus on awareness of mainstreaming and attitude enhancement. As one representative said, "Regular educators are always a priority for us, as is mainstreaming. We do workshops in the districts each year on mainstreaming." And, according to another CSPD coordinator, "We have additional needs in training regular educators. We have to keep recycling these training sessions to increase understanding of mainstreaming." The pervasive feeling is that most regular education inservice is repetitive and is at the level of giving participants general information or "awareness." The net effect, according to one interviewee, is "an inability to give (regular educators) precise skills in instruction. They are not effective and kids keep on returning to the resource rooms."

In Indiana, regular education inservice is no longer a priority, not because there is no longer a need, but rather because local districts saw regular education inservice training grants, or the REGI initiative, as resulting in

*The Key for abbreviations in Table 7 is provided following the table.

Table 7. Inservice Priorities: Target Participants

	Reg ed	Parents/ caring	Overall spec ed	Admin	Voc ed	EC	SPH	EDBD	LD	Hearing aff	Paraprof	Rel serv	Trainers	Speech
Alabama	X		X	X	X				X					
Alaska	X	X		X		X	X							
Arizona			X					X						
Arkansas	X	X	X	X	X				X	X	X			
California	X	X	X	X	X	X	X	X	X				X	
Colorado	X		X				X							
Connecticut	X	X	X	X	X						X	X		
Delaware	X			X	X				X					X
Florida	X	X	X	X		X	X		X		X			X
Georgia	X	X	X									X	X	X
Hawaii	X										X			X
Idaho	X	X	X	X	X			X				X		X
Illinois	X	X	X	X	X		X	X	X	X	X		X	
Indiana	X		X		X		X	X		X				
Iowa	X	X	X		X		X	X						X
Kansas	X	X		X	X	X	X	X		X	X	X	X	X
Kentucky	X	X	X	X		X	X		X	X			X	
Louisiana	X	X			X	X	X	X						
Maine	X	X	X	X	X	X	X	X	X	X	X			
Maryland	X				X	X	X		X	X		X	X	
Massachusetts	X	X			X	X	X							
Michigan	X		X		X							X	X	
Minnesota	X	X		X		X	X	X	X					
Mississippi			X	X										
Missouri		X	X	X	X	X		X	X	X	X	X		X
Montana	X	X				X								
Nebraska	X	X	X	X							X		X	
Nevada	X	X												
New Hampshire	X	X	X	X	X	X		X			X	X		X
New Jersey	X	X	X											
New Mexico	X	X	X	X	X					X				
New York	X	X		X	X					X				
North Carolina	X	X	X	X	X	X		X	X		X		X	X
North Dakota		X				X		X						
Ohio	X	X								X				
Oklahoma	X	X												
Oregon	X													
Pennsylvania	X	X												
Rhode Island	X	X	X	X		X			X			X		
South Carolina	X	X		X			X							
South Dakota		X	X	X		X		X				X	X	
Tennessee	X	X					X			X			X	
Texas							X							
Utah	X		X										X	
Vermont	X	X	X	X	X	X		X	X	X	X			X
Virginia	X	X	X	X	X	X	X	X	X	X				
Washington	X	X	X	X			X			X				
West Virginia	X	X	X	X	X									
Wisconsin	X	X	X	X	X	X	X	X	X			X	X	X
Wyoming	X	X	X	X						X				
Guam	X		X								X	X		X
Puerto Rico	X					X	X				X	X	X	
BIA	X		X	X		X			X		X	X		
Dist. of Columbia	X	X	X											
N. Marianas			X						X					
American Samoa			X											
Virgin Islands	X		X			X								
TOTAL	49	39	37	30	24	23	21	18	18	16	15	14	14	13

*The Key for abbreviations in this table is provided below.

Table 7. (continued) Inservice Priorities: Target Participants

	SED	HI	Psych	Multi handic	Res	Bil	VH	Curric coord	Board of ed	PE	Higher ed	Counselor	Sec sch	Teacher educ	COHI
Alabama															
Alaska	X														
Arizona	X		X			X									
Arkansas	X														
California				X	X	X		X						X	
Colorado		X					X								
Connecticut															
Delaware	X	X	X	X											
Florida		X						X							
Georgia		X	X		X					X	X				
Hawaii		X					X								X
Idaho	X	X	X									X	X		
Illinois						X					X				
Indiana				X	X		X								
Iowa		X					X								
Kansas			X	X			X								
Kentucky								X							
Louisiana	X														
Maine				X											
Maryland															
Massachusetts						X									
Michigan			X			X									
Minnesota		X		X						X					
Mississippi															
Missouri		X	X			X	X				X	X			
Montana															
Nebraska								X	X						
Nevada					X			X							
New Hampshire					X				X	X					
New Jersey						X									
New Mexico															
New York									X						
North Carolina	X	X											X		X
North Dakota															
Ohio															
Oklahoma															
Oregon	X														
Pennsylvania															
Rhode Island						X						X	X		
South Carolina															
South Dakota					X			X	X		X				
Tennessee			X					X							
Texas	X														
Utah					X					X					
Vermont	X			X	X										
Virginia	X														
Washington	X														
West Virginia										X					
Wisconsin		X	X	X			X		X				X		
Wyoming															
Guam			X		X										
Puerto Rico	X			X											
BIA									X			X		X	
Dist. of Columbia															
N. Marianas															
American Samoa															
Virgin Islands															
TOTAL	13	11	10	9	9	8	7	7	6	5	4	4	4	2	2

*The Key for abbreviations in this table is provided below.

Table 7. Key: Inservice Priorities

Reg ed	Regular education teachers
Parent/surrog	Parents or surrogates
Overall spec ed	Overall special educators
Admin	Administrators
Voc ed	Vocational education
EC	Early childhood
SPH	Severely & profoundly handicapped
ED/BD	Emotionally disturbed/behaviorally disordered
LD	Learning disabled
Hearing off	Hearing officers
Paraprof	Paraprofessionals
Rel serv	Related services
Speech	Speech/language
SED	Severely emotionally disturbed
HI	Hearing impaired/deaf
Psych	Psychologists
Multi handic	Multiply handicapped
Res	Resource room teachers
Bil	Bilingual
VH	Visually handicapped
Curric coord	Curriculum coordinators
Board of ed	Board of education
PE	Physical education
Higher ed	Higher education
Soc wrkr	Social workers
Teacher minor	Teachers of minority students
COHI	Crippled & other health impairments

neglect of special educators. Consequently, the top inservice priorities across the state now are special educators and related services personnel.

An interesting permutation of the inservice training of regular education is the joint training of regular and special educators, specifically noted by Connecticut, Kansas, Louisiana, Michigan, New Jersey, Rhode Island, Vermont, Washington, and Wisconsin. Three of these states are providing a variety of training in assessment and inter-

disciplinary planning in an effort to foster communication between regular and special educators, as well as an understanding of mutual roles. As one respondent stated, "Special educators say they need assistance in dealing with regular educators and administrators and vice versa."

Two states have initiated new inservice programs that involve the teaming of regular educators, special educators, and vocational educators to address the needs of secondary education for the handicapped. In the remaining four states, the focus of the joint training is on the identification and assessment of the mildly handicapped, specifically the learning disabled. In all four cases, the training is building-based and involves teams of teachers who can provide support to their peers in the regular classrooms. Washington has developed a cooperative planning and programming initiative involving local district teams of 15 people, including regular and special educators, the SEA, and other relevant organizations, who identify barriers to full service for handicapped students. In both Washington and Vermont, the use of local district and building-based training is anticipated to increase regular education's participation in inservice, which has been a major problem in the past.

California's Special Education Division has an objective to develop a minimum of three alternative educational models that effectively coordinate the resources at the school site level. The Personnel Development Unit and the Special Education Resource Network (SERN) have developed training programs to assist districts and Special Education Planning Areas (SELPAs) in the implementation of the Student Study Team process, Cooperative Learning and the Strategies Intervention Model. Each model supports the integration of special education and regular education personnel.

Retooling

The retooling or retraining of personnel to assume new instructional roles continues to consume some of the inservice training resources in about a fourth of the jurisdictions surveyed. Of these efforts, the most common foci of training are the areas of OT and PT and the visually handicapped, followed by the severely handicapped. The need for training

in these areas was directly attributed in every case to the shortage of personnel to staff programs and to the lack of in-state preservice programs in these specialties. For example, Tennessee and West Virginia contract with IHEs to conduct summer training workshops leading to certification of special education teachers in the area of the visually handicapped. Texas has designated a $50,000 annual expenditure (inservice) for teachers serving autistic students.

In the areas of OT and PT, states are training SH personnel to deliver these services in the classroom, again because of severe personnel shortages in these related service disciplines. Of the states that reported some retraining through inservice, only Massachusetts indicated that the need for retraining was a result of the reductions in force of several years ago and the resultant bumping of special educators by regular education personnel with more seniority.

One encouraging sign is that the retooling of general special educators to work with the severely handicapped appeared to be diminishing as preservice training programs have been developed or expanded in these specialty areas. Another encouraging sign was the number of jurisdictions (N=10) that specifically stated that their inservice training had shifted from retooling or retraining to upgrading or increasing the skills of personnel. For instance, the CSPD coordinator in Illinois stated: "In general, our inservice is geared to developing skills of qualified personnel and not retooling. We have done the knowledge/awareness thing and the retraining of unqualified individuals." This move away from retooling was echoed by those individuals interviewed in Louisiana, Mississippi, Minnesota, Missouri, and West Virginia. In Kentucky, there is a move to establish a "real staff development effort" focused on instruction and new skills, now that the "six-hour wonder has been stopped and people have the basic background."

Retraining Due to Policy Changes

The retraining of special educators and regular educators is also taking place in the context of massive inservice programs being mounted to address new legislative mandates. The inservice training in the wake of such legislation appears

to be one of two types. It either addresses newly mandated teacher qualifications or competencies, or it provides training related to new curricula, graduation requirements or other student programs mandated in the reform packages.

In South Carolina, for example, the new Education Act requires districts to do inservice and also requires that teachers demonstrate specific competencies. These competencies will be a major focus of all inservice efforts in the state. Michigan's new rules regarding certification will require extensive retraining of teachers, and the state is already is the process of developing training packages. The Idaho State Board of Education has adopted a two-part requirement that 1) all certified educational staff receive a minimum of six credit hours of instruction before the renewal of their certification, and 2) all local districts develop and implement a district-wide professional development plan that is to be filed with the SEA. This commitment to inservice is expected to increase both participation and course offerings within local districts.

The state of Indiana has also enacted changes in its certification policies, which now require teachers without a lifetime teaching license to take 180 certification renewal units each five years. These renewal credits can be taken in the local district through inservice programs, and "stringent" criteria are being applied to determine what is acceptable as a renewal credit. The result of this new policy is a major emphasis on development of inservice programs as well as an increase in participants. On the other hand, a similar incentive program in Louisiana (PIPS), in which teachers could earn points for college coursework and inservice that converted to salary supplements, was discontinued because of the perceived lack of quality in the courses offered for credit.

Among those districts that have enacted new legislation affecting programs for students, such as minimum competency testing or simliar school exit exams and standardized curricula, inservice for both regular and special educators is heavily focused on increasing an awareness of the new policies, as well as helping teachers develop or adapt existing curricula. Since the policies affect all students in a generic way, one of the initial and major tasks within the special education inservice programs is to prepare teachers of the handicapped to adapt their existing programs to meet the new standards.

Inservice for New Personnel

Related both to the retooling of personnel and to the issue of teacher quality is the use of inservice training to supplement or otherwise shore up the skills of new graduates. Fifteen jurisdictions specifically reported that they develop and conduct inservice training for new personnel, to either sharpen skills in highly specialized areas, such as bilingual special education or sensory handicaps, or to teach procedures and policies. Among the states providing new personnel with inservice in specialized areas are Arizona and Nevada, which provide inservice related to teaching in rural areas, and Iowa, Montana, and South Dakota, which provide training in the low incidence areas and in the management of the emotionally disturbed/behaviorally disordered. In Guam where the preservice is generic, inservice training is necessary to give personnel the specialized skills for working with individual handicapping conditions.

Of the 15 jurisdictions providing inservice to new graduates, 12 are providing training in the area of policies and procedures. Among these jurisdictions, there is a general feeling that there is a need to train new graduates to understand the real world of the classroom — the rules and regulations, the IEP process, multidisciplinary teaming, working with parents and other practical matters. The feelings and frustrations of SEA personnel who must design inservice to supplement the skills of new graduates are expressed in the following statement:

> "New graduates get inservice on pupil progress monitoring. Some things are better done at the inservice than the preservice level. Next year we will begin working with new people early. There will be a special summer academy with intensive training before they go on the job. The concept of academic freedom doesn't do a damn thing for teacher training. We have worked hard to help districts decide their inservice needs and each district gets different stuff, but it's hard to infuse new training when we are trying to bridge the gap between new graduates' skills and local district needs."

In general, SEAs were somewhat ambivalent about the locus of responsibility for such training; however, there clearly

was no question that new personnel in special education frequently need further specialized training in the nuts and bolts of conducting special education programs. Respondents often expressed the hope that SEAs and IHEs could work more closely to ensure that new graduates have the requisite skills for teaching in the local schools within a jurisdiction. Unfortunately, one state, California, that had developed such a cooperative effort recently experienced a setback in its attempts to have the SEA and IHE provide joint inservice. The state-funded Special Education Resource Network (SERN), an inservice network housed at Sacramento State University and involving active cooperation of both SEA and university faculty, has been moved because of the high indirect cost rate charged by the university. In addition, those interviewed also expressed a desire for more IHE faculty involvement in planning and delivering inservice training and related outreach activities in local districts.

Hawaii's SEA has developed a process for delivering on-site competency based inservice training using a series of modules. Each module presentation consists of a four-hour mini-course and four hours of optional follow-up activities. Inservice training is flexible as modules may be used as indicated by participant need and whether or not credit is desired.

Inservice Funding

In all but 10 of the jurisdictions surveyed, local district and state inservice activities are funded almost entirely by P.L. 94-142, through a combination of Part B monies and Part D (Personnel Development) grants. Of the 10 states using only state funds, all had used Part D monies in the past but had not had a grant for some time. Most jurisdictions are very dependent on Part D dollars to maintain a basic inservice program across districts; five jurisdictions stated that they rely on these discretionary grants to fund their CSPD activities. In general, the funding of inservice or staff development activities — for both regular and special education — was reported to have received a low priority within state budgets. Some SEAs see the new school reform legislation as a signal that states may begin to put more money into inserv-

ice for all teachers, although at the time of these interviews, appropriations for the new legislative packages had yet to be determined.

When states use a combination of Part B and D dollars for inservice, most of the Part B dollars go to the districts to fund local training efforts. A small amount is used to support the state-level administrative functions, such as the position of CSPD coordinator, as well as the basic CSPD activities such as planning and convening the committee. In these instances, Part D funds are used to support statewide training initiatives as well as specialized training and "model programs." One example of such inservice programs is Louisiana, which funds about 10 faculty positions across the state in the low incidence areas, as well as a series of annual training institutes. Another state using Part D funds for specialized inservice training is Maryland, which has developed an instructional television course to upgrade the skills of present early childhood educators in the area of special education. Utah and South Carolina are doing extensive statewide training in the use of microcomputers as instructional tools and in monitoring of pupil progress. Michigan allocates a portion of Part B funds to districts, on a regional basis, for SEA-sponsored CSPD activities.

Of all the inservice issues discussed by the interviewees, funding was considered the most critical. Surprisingly few states earmark significant amounts of funds for staff development. As most representatives noted, this item is a low priority in budget planning, and funding varies tremendously from year to year, making it difficult to do long-range planning or initiate long-term training activities. As noted earlier, the new emphasis on teacher quality, including the new certification policies requiring local district supervision and training may elevate staff development funding in the budget planning, to the benefit of both regular and special education. However, in the meantime, special education inservice across the country is heavily dependent upon federal dollars, specifically the Part D discretionary grants.

These grants become even more important to the continuation of inservice training because fewer than 10 jurisdictions reported that they required their local districts to set aside a percentage of their Part B flow-through

monies for staff development. Virginia noted that few local districts used their Part B dollars for inservice; when they did, it was reported the inservice tended to lack creativity. In Vermont, staff development is considered a low state priority, and state funds for staff development have not been increased in over six years; Part D funds represent over half of all the inservice training dollars. Hawaii's situation is even more acute, because Part D funds support all inservice activities.

The following are examples of comments made by different individuals regarding the importance of Part D funding:

> "We've had no D funds for two years. We have had some good programs funded by this, and this has been some of our more useful money. It allows us to provide leadership and allows us more freedom and creativity. We also were able to do a lot with IHEs. Our CSPD money goes to districts and we see the same old stuff."
>
> "We have a Part D grant this year for $73,500. This money provides for networking, distribution of materials and other additional items that could not otherwise be provided for personnel development across the state."
>
> "If we lost Part D, it would make it hard to have a comprehensive program. Most Part B goes to local districts for inservice. Part D is for statewide activities."
>
> "We didn't get a Part D grant this year and a large portion of training was therefore lost. We used to hold 15-20 study institutes each year, but now these are gone."
>
> "Inservice funding is getting to be a serious situation. Part B money is getting tight; every year there is a little less to use for training, and there are no state dollars. We have two Part D grants now which are providing for most of our training."
>
> "There is a strong commitment in our state to inservice training and extensive parent training. This would have to go without Part D funding."
>
> "We [the SEA] don't feel that we should be competitive with IHEs for Part D grants.

> Without our Part D money it would be difficult for us to continue any training at the state level. We already are giving counties 5 percent more in discretionary money than we have to."

It was very evident throughout the interviews that staff development and the continuing education of public school personnel generally receives minimal state-level financial support. While this may change once the new school reform legislation is in place, the current funding situation requires supplemental federal funds to conduct inservice training in special education. It should also be noted that large numbers of regular education personnel are participating in training sponsored by these funds, further enhancing their impact.

Summary

This chapter has presented only those topics related to inservice training that were most frequently discussed during the interviews. A number of other scattered issues were raised, and, though these were not systematically surveyed, they deserve mention. One relates to the current options for delivering inservice training. Several individuals expressed concern about current inservice models. On the whole, current models are perceived as ineffective. Training results in little change in performance, and individuals must be continuously recycled. To address this need, some of the jurisdictions are turning to local building-based training models, which they believe will be more effective and more responsive to individuals' needs. It should be noted that these concerns were not generally based on any strong evaluative data. Rather, they reflected the training needs assessment data that states collected from their local districts or schools.

This concern over the lack of effective inservice models was also noted in a study of faculty in departments of special education conducted by Noel, Valdivieso, and Fuller (1985). In this study, faculty were asked to indicate the priority placed by their department and by themselves on various professional activities, one of which included providing inservice training to local school districts. Some 60 percent of the 67 individuals interviewed gave this an average to low priority rating in terms of both their own

view and that of their department. Faculty cited as one reason the decreased availability of federal funds earmarked for inservice. However, a majority of those interviewed also indicated that even if funds were available, they were not eager to continue to do local inservice until new more effective models were developed.

Some areas of concern noted in the 1982 interviews did not emerge in the follow-ups. This is not to say that they may no longer be a concern, but jurisdiction spokespersons did not see them as such. An example is the influence of teacher unions and local contract restrictions on delivery of inservice. In 1982, a small number of districts reported considerable interference of contracts on inservice training, including the need to negotiate inservice plans in advance. No jurisdiction reported problems with unions, although several did note that it was difficult to provide inservice to regular educators because of conflicts with the limitations on the total number of staff development days allowed within a local district.

Finally, evaluation of inservice remains a weak link. Few jurisdictions report any data, or even anecdotal "evaluation" information, to support either current efforts or changes in priorities. Although the interviews did not specifically elicit this information, it does appear that the entire staff development process — from needs identification through determination of effects — is typically based on limited feedback from local districts or internal agency judgements. In fairness to those who administer the staff training programs, the lack of resources, particularly chronic lack of staff, is a major obstacle in conducting evaluations. However, given the dissatisfactions with current models and the recurring emphasis on certain topics and participants, a plan for comprehensive evaluations seems advisable.

References

Noel, M.M., Valdivieso, C.H., & Fuller, B.C. (1985). *Determinants of teacher preparation: A study of departments of special education.* College Park, MD: Institute for the Study of Exceptional Children and Youth, University of Maryland.

Chapter 5

PERSPECTIVES ON MONEY AND MANDATES

SUMMARY

Over the two years between the initial manpower survey and the present update, some rather positive movements and changes have occurred across the nation and its territories. Probably the most significant change has been the focus on educational excellence and the spate of reform legislation passed in the states. From mandated minimum competency testing and standardized curricula to major revisions in licensure of professionals, there has been a clear message regarding the importance of education and teachers.

The impact of this movement on manpower was felt most acutely in the area of certification where there are new requirements for testing teachers, supervised first-year or provisional certification periods, and other local procedures for evaluation and monitoring of new teachers. Included among the certification revisions are new requirements for renewal credits or other staff development activities for veteran personnel. Discussed in more specific detail in Chapter 1, examples of such new initiatives included Virginia's beginning teacher assistance program with a two-year probationary period supervised by local school districts and Tennessee's sweeping Comprehensive Education Reform Act, based on a career-ladder system involving periodic evaluations and a merit pay scale. Exemplifying the broad-based reform approaches, Nebraska's new law includes certification changes, an entry-level assessment program, professional development funds, and performance-based accreditation; in addition, Nebraska has a curriculum dissemination program, a technology consortium and strong promotion of cooperative programs among local educational units.

Funding and fiscal resources were other notable areas of change in the follow-up interviews. In general, the financial situation among states and jurisdictions has eased somewhat from the peak crisis year of 1982. About a fourth of those jurisdictions included in the follow-up indicated that state dollars for special education have been increased since 1982. It is not clear whether those increases represented a step for-

ward for educational funding and program expansion or merely brought the states back to the pre-recession funding levels. In any event, there was an atmosphere of stability among almost all jurisdictions in terms of programs and personnel and the promise of even higher levels of educational funding once appropriations are set for the new educational legislation.

A few states were still experiencing a tight funding situation. For example, the representative from Oklahoma stated: "We are hurting for money now that the energy bill has evaporated. There are no RIFs, but we're seeing kids moved more and more into mainstreaming and resource rooms to get more services from a teacher. Districts are very short of money — there's no increase in state money, and I don't know how districts will (provide services) next year."

By contrast, in Indiana an increase in state money led to an increase in the number of teachers employed in 1983–84. The largest increase was 112 new resource teachers, and full-time classes for learning disabled students increased by 81 during the same period. In 1982, Indiana had experienced severe cutbacks that had forced layoffs, reorganizations and cuts in services. By 1986, this crisis had passed, and the decisions had been reversed.

Some states gained funds through new grants, while others had grants that ended and lost service or training programs. Several states, such as Colorado, Tennessee and Utah, initiated new special education funding formulae that tied funds to actual services provided or to levels of severity. Despite the vagaries of grants funds, as well as other fiscal adjustments, the prevailing tone of the interviews was one of general stability with some optimism about the future.

Another area of stability in the states was the perception of federal impact on special education programs. While there was some variation in the responses to questions on this topic, it is fair to say that, with respect to monitoring and regulating, most states have not felt a great federal presence or intrusion over the two-year period between the two interviews. The territories have understandably felt the largest impact, both historically and recently, because of their total dependence on federal monies for special education. Responses from representatives of three territories indicate the extent of the federal impact:

• "The federal laws have brought the Virgin Islands int compliance and have created the awareness and understar ding of the needs of the handicapped. We have never receive the dollars we needed, but we would not have made th moves we made without the federal direction."

• "All of the programs in the Northern Marianas starte because of federal regs and funding. The feds have provide total funding, and when dollars decrease or dry up, there is n precedent for local support. The feds have created awarenes of the needs and capabilities of the handicapped, but the loca feeling is that the federal government started this and the better keep it going. It wasn't until 1986 that the local goverr ment first allocated funds for special education programs."

At present, there seems to be a level of contentment wit the degree of federal involvement in the operation of state special education programs, but federal impact has not bee totally absent. A number of states credit the federal prior ties, often tied to discretionary funding, with moving them t create new programs for handicapped students. The most fre quently mentioned areas were early childhood education an transition from school to work. In early childhood educatio for instance, almost all the states that had recently enacte new legislation mandating or permitting progams for youn handicapped children attribute the changes to the long standing federal push and financial support in this area.

A significant federal impact was also noted in program for the severely handicapped and in the emerging area of in carcerated youth, which a few states report that they hav been forced to consider as a result of federal monitoring Finally, almost every jurisdiction noted how critical the per sonnel development funds (Parts B and D) are to the state efforts to maintain an adequate supply of well-qualified per sonnel. The following quotes provide a sense of the ways i which states are perceiving the federal government's impac on special education:

• "We have felt very little impact (over the past tw years). LRE has been targeted for improvement, and we ar working on that. The federal preschool incentive grant ha allowed us to do screening of all preschoolers in the District.

• "There has been little coming from the feds during th last two years. We have felt real stability."

- "Overall, the federal government has been very helpful. Districts would not have had the funds for certain services without federal support."
- "The biggest impact has been in assisting in establishing students' rights and in enforcing rules and monitoring. Part B funds gave us flexibility to do new and better things. With our entitlement monies, schools could bring in new things and supplement current efforts."
- "We haven't felt any impact lately. We have taken more responsibility in special education and have adjusted our state regulations to make them reasonable for us."
- "Federal dollars are now in the minority. I'm as pleased with the feds as I've ever been now that they haven't deregulated, and I'm pleased to see the money behind transition."
- "We would not have had training programs without P.L. 94-142. You could kiss off any organized training. (The law) hasn't done what it set out to do; there is a long way to go. We have opened some doors, and we have finished the first ten years, and we should get about evaluating and finding the next major steps."
- "We have felt no real presence from the feds. We don't have a lot of complaints. The feds recently told us to look at juvenile offenders, and we will; there is no resentment."
- "The greatest influence of the federal government has been in the area of LRE and defining what that means. We haven't always agreed with the feds, and they haven't always been helpful in defining the criteria we are supposed to meet. Another big federal impact has been the parent/professional partnership . . . this has been very positive."

All in all, there appeared to be little acrimony between the states and federal government, although there were scattered concerns regarding policymaking in several areas. For instance, Colorado expressed concern with the dismantling of the deaf-blind centers, and Nevada said that federal intervention in their program for adjudicated girls would impair the existing program. Despite the general contentment, interviewees saw the need for improvements.

When asked what advice they would like to give to the U.S. Congress or federal bureaucracy, respondents most frequently (N=19) cited the need for full funding of the Education for All Handicapped Children Act and for assurance that

federal funding will continue so that states can initiate long-range plans. Only one individual, the representative from Alaska, suggested that there was a need to cut back on spending until evaluations of effectiveness of current program efforts could be conducted to see if funds are being used in the best way possible. Examples of comments with reference to spending are as follows:

- "I would advice the federal government to ease state anxiety through a 'hold harmless' clause to assure states of *X* number of dollars in years to come, regardless of the economy."
- "We have to fund programs at a level that will maintain what we have — I can't empathize with cutting special education because it costs more. We have shown that we can do things for the handicapped, we need to support what we have and to start our progams early."
- "My advice is to not overlook the handicapped. They should be an integral part of the educational system and not just an add-on program. Parents of the handicapped should get what parents of the nonhandicapped get; they're taxpayers too."
- "I would like to see all special education funds put into a block grant, including the training money. The state could administer the money without so much hassle."
- "The feds should send more money. Also, (the federal agency) Special Education Programs should look closer at the impact of programs on regular education."
- "The feds should forget bare bones budgets and allow enough money for special education. They should also allow states more creativity in funding services and quit beating us over the head. Block grants would be a good idea at the state level."

The two next most common areas of advice related to maintaining or strengthening existing regulations (N=6). All comments related to regulations were supportive of the effects that these federal policy statements have had on program development within the states and recognized a need to look ahead to better programs. Some representative comments include:

- "We need to continue both the regulations and the dollars for the handicapped. The law has had a monumental effect in South Carolina. We need now to look at pro-

gram quality — we've moved beyond ensuring access, and now we have to see what we're doing with these kids."

- "We need to maintain, in the forefront, the commitment of the government to special education. States cannot do it all."
- "The federal regulations should continue to support states in delivery of special education services. Do not put 94-142 into a block grant, but allow maximum state and local control."
- "Don't touch the law or regs, give us a chance; we need more time to prove ourselves."
- "We need stronger legislation for the rights of the handicapped. We need a larger effort to really understand what it all means to America."

In the area of staff development, the comments were strongly in favor of increased attention to the need for quality personnel and increased funding for these efforts.

- "Inservice is the most important thing we can do. A lot of kids are getting good services, but we will lose our grip if we can't keep our teachers informed and trained."
- "The feds need to put more dollars into Part B training and Part D. They need to emphasize training in rural and remote areas and provide incentives for training specialists such as OTs and PTs. There is nothing more important than training our personnel."
- "We need assurances that there is a mandate for support for teachers. We need CSPD because leadership is the most critical thing, more than dollars. If we can't coordinate services and provide technical assistance, we can't support our teachers."
- "We would like to see real support for personnel development. Business sees this as a priority, and if it's good for business, it's good for education. We need to include regular education in staff development and provide the funds and commitment to this."

Five states representatives felt that the federal government needed to pay greater attention to local constituencies when setting program funding priorities. The general sentiment was that policymakers should not be program implementers, but should allow things to develop and then evaluate before making revisions in federal policy. There was

also a feeling that the federal government did not seek broad-based input from states before adding or discontinuing programs or changing priorities. Even in highly specific program areas, such as rural education or programs for the deaf-blind, respondents felt that there was enough variability among states to preclude any blanket program initiatives.

The remaining advice from the states was scattered across a number of topics. For example, four states felt that the federal government should take a stronger position on interagency cooperation and should require other agencies to assume more responsibility for the handicapped. Three states cited the need to look at parent involvement, and two considered that coalitions and organized advocacy groups had really usurped the roles of the individual parents. There were scattered comments about the need to focus on quality programming and move away from a compliance mentality that focused only on minimum standards. A related need, noted by three interviewees, was requiring evaluations of programs and establishing some accountability. In general, however, the states appear to support the federal government's presence in special education and to see the federal-level mandates and money, when not overly prescribed, as positive catalysts for program improvement efforts within the states.

Conclusions

The purpose of the follow-up survey was to provide a status report on the state of special education manpower across the United States and its territories. The interviews focused only on those changes that had occurred during the four-year period that had elapsed since the initial survey was conducted in 1982.

Overall, as compared to 1982, the responses to the present survey indicate a general lessening of fiscal constraints across most of the country and more optimism about the future stability of special education programs. This is not to say that all is well in terms of the personnel situation in special education across the 57 jurisdictions surveyed. Personnel shortages continue to plague almost every state and to curtail program development in some areas. In addition to issues of manpower supply, the jurisdictions reported an increased interest in improving the quality of personnel who educate the handicapped. This concern is an extension of the

national educational reform movement that has been sweeping the states during the same period. The preliminary effects of this movement were cautiously viewed as positive signs for the future, but the real benefits have yet to be assessed. In the remainder of the chapter, we provide an overview of the major findings of this most recent survey and most evident conclusions.

Certification

Since the first survey was conducted, jurisdictions have been particularly active in revising policies concerning certification or licensure of personnel. Fully 65 percent of the jurisdictions had made some changes in their policies, ranging from creation of new specialty areas to massive reforms such as teacher testing, first-year supervised internships and peer evaluations. Other frequently mentioned changes included more stringent requirements for certification renewal, including a tightening of the types of courses or experiences judged acceptable for staff development. In most instances, changes were part of larger educational reform packages that included new school standards, uniform curricula or minimum competency testing requirements.

There was little change among the jurisdictions in terms of the proportion of those offering generic or cross-categorical certification versus those endorsing in particular specialty areas. Slightly fewer jurisdictions reported having generic or cross-categorical certification, and concerns about such certification were prevalent. A number of jurisdictions were reconsidering these policies, even when they had moved recently from specialized to generic certification. The conflict seemed to lie between the desire for ultimate flexibility in pupil placement and personnel deployments, on the part of local districts program administators, and the concern about the ability of generic special educators to provide quality services to a diverse range of handicapped children.

Another area of certification that was reported to be creating personnel problems was the change towards new and more restrictive licensing policies for speech and language clinicians by the American Speech and Hearing Association. While the new policies require higher levels of training, school districts were finding it more and more difficult to attract and maintain these more highly trained per-

sonnel. Thus, though there were frequent state-level pol
revisions designed to improve the quality of personnel,
those operating special education programs the dilemma
mained the same: How could the necessary services be p
vided with limited manpower and financial resources?

Supply and Demand

New Graduates. The actual levels of personnel availa
to local school districts did not change substantially over
four-year period, and shortages were still prevalent in all ju
dictions. In terms of preservice programs supplying the r
personnel, the situation was only slightly improved. In 19
only 15 jurisdictions had preservice programs in all of
specialty areas, as compared to 12 in 1982. Several other ju
dictions did report adding additional training programs
some areas. Nonetheless, 44 percent of the jurisdicti
reported that their supplies of new graduates were decreasi
while another 46 percent said that the number of new gra
ates was stable but insufficient. The decline in new gradua
was attributed to the general drop in enrollments in Colle
of Education across the country; however, some states w
decreased general education enrollments said that spe
education teacher training programs had been only minim
affected. Among those 42 jurisdictions reporting miss
perservice programs, the most frequently absent progra
were those for teachers of the visually handicapped, occu
tional therapists and teachers of the crippled and health
paired followed by programs to train vocational educat
teachers and teachers to work with the hearing impaired.

New Graduates vs. Pupil Enrollments. When projecti
regarding supplies of new personnel are compared to tre
in enrollments of handicapped children, 28 jurisdictions
found to be facing increased personnel shortages, on top
current shortages. An additional 18 jurisdictions will rem
at current shortage levels. Only four jurisdictions have
potential for having a pool of new graduates larger than
number they will require.

Current Manpower Shortages. In addition to disc
sing projected manpower needs, respondents were asked
identify specific areas of current personnel shortages a

surpluses by updating the information provided in 1982. At the time of the follow-up survey, personnel shortages continued in all but two jurisdictions, Alaska and the District of Columbia. Furthermore, 23 percent of the jurisdictions reported that their manpower shortage situation had actually worsened since 1982. However, 30 percent reported some improvement in the personnel situation, usually less critical shortages in certain personnel categories. The most prevalent shortages were still in the related services areas of occupational and physical therapy, but these were followed closely by speech and language clinicians and teachers of the emotionally disturbed. Prevalent shortages were reported for teachers of the severely handicapped and preschool handicapped. Personnel shortages were again most acute in rural areas, as well as inner city areas, and showed no signs of improving.

Some 40 percent of the jurisdictions reported some level of personnel surplus, that is, more teachers than available jobs. Two states reported general oversupplies of personnel, and an additional five states reported surpluses of most types of special education teachers in metropolitan ares. Other surpluses were predominantly in urban areas and included only teachers of the mildly handicapped and/or general special education. These data do represent a reduction in surpluses for the four-year period, which some representatives attributed to the cessation of RIFs. Despite the surpluses, the manpower situation remained tense across the United States, with both current and projected teacher shortages prevailing.

Factors Contributing to Manpower Supplies

Quality of Personnel. Next to actual shortages, the issue most often mentioned by the respondents was the quality of currently employed personnel. Only nine of the jurisdictions reported no concerns about the skill levels of special education personnel. The most frequent concerns centered around the generic or cross-categorical teachers, considered by the districts to be ill-prepared for the range of handicaps represented in the noncategorical classrooms. The skill deficits appeared to be particularly troublesome when emotionally disturbed/behaviorally disordered students

were involved. The need for more teachers with appropriate behavior management skills and understanding of general programming for these students was found to be a main personnel need, a gap as serious to the jurisdictions as the actual teacher shortages.

Another quality issue involves the area of procedural competence, such as IEP development or understanding of due process. The issue here, however, appears to be more of a mismatch between the instructional skills teachers learn in their preservice training programs and the paperwork requirements imposed by local school policy. On the whole, jurisdictions were not well pleased with the level of training or preparation of their teachers. Furthermore, the jurisdictions are attempting to upgrade the skill levels of personnel through establishment of new certification requirements. This bureaucratic response to the quality issue ignores the context in which teachers must function, including class sizes and availability of resources or supports. Nonetheless, the quality issue was prominent in the follow-up interviews.

Less-Than-Full-Certification. In 1986 jurisdictions continued to grant provisional, temporary or less-than-full certification to fill special education positions. Almost half of the jurisdictions reported issuing about the same numbers of waivers each year, while about a third had increased the number of such certifications they approved over the four years between surveys. While some of the increases were attributed to program expansions, such as new secondary programs or programs for seriously emotionally disturbed students, most of those interviewed offered no extenuating reasons for the increases and saw them as continuing indefinitely in the face of consistent manpower shortages. Several individuals reported that a third to over half of all special educators in their states were on temporary or provisional certifications.

Some states have made an effort to begin imposing some form of quality control over the issuance of temporary certification. These include new requirements for granting waivers to those with education backgrounds versus those without, strict limitations on the number of years an individual can remain on provisional certification, and

written plans for coursework leading to full certification. In addition, between 1982 and 1986, three jurisdictions had eliminated the practice of temporary certification through legislation.

While less-than-full certification was a major concern to those interviewed, it was also seen as a necessary evil given the lack of fully trained personnel. While the practice results in questionable quality among special education personnel, without such personnel, even basic programs could not be maintained.

Attritions and Reductions in Force. Loss of special education personnel through reductions in force was not a problem in the vast majority of jurisdictions surveyed in the follow-up because fiscal constraints were generally lessened. In several states that had experienced large layoffs of teachers in 1982, rehiring had brought personnel numbers almost to former levels. Thus, the practice of bumping — that is, teachers with more seniority replacing those with less — was no longer an issue. However, future personnel cutbacks have the potential of replacing certified special educators with noncertified but more senior regular education teachers. This practice is even more likely given the state policies regarding provisional or temporary certification and the granting of certification waivers. Thus, personnel policies within states continue to be directed towards maximizing flexibility of teacher deployment at lowest cost to districts at the expense of quality of services.

Loss of personnel through attrition continues to pose problems for most jurisdictions, although states have little or no comprehensive data on how many of their teachers actually leave the profession each year. Most states do report that personnel turnover is high within both rural and inner city districts. The general rule of thumb in rural districts is: "If a teacher stays two years, that teacher will stay for life." Attrition is not a problem, however, in those rural districts where salaries are high, such as in Alaska. In fact, higher salaries were consistently mentioned by respondents as a remedy for high attrition. One can only assume that attrition problems will continue and increase, given the current dissatisfaction with both salary and working conditions among all teachers.

The Programmatic Context

Class Sizes and Case Loads. In 1986 there were still few controls over class sizes and case loads and no increase in regulatory constraints. Nor were there substantial efforts to gather better data to establish optimum teacher/student ratios. In 1986, no jurisdiction reported overall decreases in class sizes; however, fewer jurisdictions than in 1982 reported increasing the sizes of classes for handicapped students. For those jurisdictions that did report a class size increase, the primary reason was a combination of teacher shortage and depressed economy. The greatest increases were in part-time or resource classrooms for the mildly handicapped. In fact, some states had actually reduced recommended class sizes for moderately and severely handicapped while allowing increased student/teacher ratios for the mild populations. This trend, coupled with increased use of part-time placements, allowed larger districts to accommodate their burgeoning learning disabled population without increasing the number of instructional personnel.

As in 1982, class sizes remain almost entirely under the control of local districts; despite state regulations or recommendations about ratios, waivers and permission to deviate are routinely granted to districts. Furthermore, there is no evidence that states are generally more willing to restrict local district flexibility by regulating or defining class sizes or case loads.

Cooperative Arrangements, Interagency Agreements, and Contracting for Services. Local school districts continue to provide services to handicapped students through a variety of administrative arrangements. One example is the banding together of several small districts into a cooperative or larger service unit that then shares the costs of programs. There was no major change in either the number or function of cooperatives in 1986. Several states that have cooperative school districts reported minor adjustments, such as combining several to reduce overall numbers of cooperatives within a state. In general, cooperatives continue to be a stable form of service delivery within certain states.

Interagency agreements among Departments of Education and other agencies that serve students also continued to

be developed within states. Again, there was no evidence of increased emphasis on forming such agreements. In fact, there was some indication of disillusionment among states that had been attempting to implement previously developed agreements and finding that local changes in services were not readily evident. The feeling was that without mandates other agencies would not actually provide services as specified in the agreements. Nonetheless, many jurisdictions continued to negotiate interagency agreements. As reported for the original survey, the major goals for such agreements were focused on the transition from one program to another (for instance, from special education to vocational rehabilitation); the development of common eligibility criteria and mechanisms for tracking clients across agencies; and the improvement of services for incarcerated youth. Many of those interviewed thought that the focus on community living and the post-21 handicapped population and on the transition from school to work might bring a new impetus to developing interagency agreements and programs.

Contracting for services remains very prevalent in almost every jurisdiction surveyed, particularly in the therapies and speech and language. The primary reason for the extensive contracting for services is the acute shortage of occupational and physical therapists and, to a somewhat lesser degree, speech therapists. Contracting for speech personnel was reported to be on the increase because of new ASHA licensing requirements eliminating the bachelor's level speech clinician. Speech and language clinicians with the increased training are not typically willing to work within local public schools for existing salaries.

Most of those interviewed indicated that their local districts would prefer to hire their own related services personnel if they could find them. The most frequently reported problem with contract personnel was their lack of experience in working in the public schools and, in some cases, even in working with children. However, the shortages and the high costs of these persons often preclude the hiring of full-time related services personnel.

Definitions and Eligibility. A major trend that emerged from the follow-up interviews was increasing concern for the numbers of mildly handicapped, particularly learning disabled

students, being identified within the school districts. As a result, over half of the jurisdictions surveyed reported changes in their eligibility criteria and identification procedures for these types of students. Among the more common responses to this problem has been the wide-scale initiation of building-based assessment and assistance teams designed to circumvent special education referrals for many low-achieving students. While other definition changes occurred, such as addition of an autism classification or changes in the identification procedures for medically fragile children, the primary action pertained to the learning disabled.

Closely tied to the issue of definition and eligibility was the redefining of available service options for this population. A number of districts reported the increased use of part-time classes with reduced contact hours as another option for dealing with increasing numbers of LD students. In other words, states were attempting to respond to the problem bureaucratically through regulatory changes in definition, while districts tended to dilute services. Both options were creating controversy and concern across the states and territories in 1986.

Other Program Initiatives

Program expansion in special education was the general trend at the time of the second set of interviews. Unlike the first survey, the follow-up found few reports of programs being lost or reduced. A large and diverse number of new programs were begun, with the greatest expansion in early childhood education programs and, at the other end of the continuum, in programs for secondary students and transition from school to work. In these areas, states appeared to provide the leadership in developing and promoting program development. State action sometimes involved interagency agreements, certification, and training.

Another program issue that continued to plague states was that of providing special education services in rural and remote areas. In 1986, as in the previous survey, the jurisdictions reported continued problems with recruitment and retention of personnel, with the high costs of providing services to low incidence populations, and with the general need for service models that respond to the unique needs of these geographic areas. While there was evidence of some new de-

velopment, the overall tone of the interviews was one of continued concern, and perhaps frustration, as states explored new programs and applied administrative remedies to the problem of how to provide quality services to handicapped students in rural areas.

Overall, the follow-up interviews revealed a somewhat greater amount of activity in program development than was reported in 1982, primarily due to the improved fiscal situation. Nonetheless, development in some areas was stifled due to the lack of qualified personnel, most notably in the area of the seriously emotionally disturbed. Also mentioned as a barrier to the expansion of the transition initiative was the lack of trained personnel in the secondary and vocational education areas. Thus, despite state commitment and available dollars, the shortage of special educators was the major programmatic stumbling block.

Inservice Training

Inservice training or staff development continued to be a major state activity, despite very limited funds and personnel. Like 1982, the major focus for much of the inservice training conducted by the states was regular educators — both instructional personnel and administrators. For some states this training represented continued recycling of training, while for others the training took on a true staff development focus with an emphasis on instilling new skills and techniques. Perhaps the most novel addition to the training of these regular education personnel was the emerging trend of conducting joint training sessions for regular and special educators as a means of enhancing cooperative program planning.

Perhaps the most striking feature of the inservice training priorities in 1986 was the new emphasis on the retraining or continued training of new graduates and other newly certified personnel entering the districts. As part of more stringent certification requirements, many districts were faced with developing comprehensive training and evaluation programs for new teachers. In addition, many of the school improvement initiatives called for additional coursework and training of existing personnel as a requisite for maintaining certification. At the time of the follow-up, there was a great deal of optimism among the jurisdictions that the new legislation with its emphasis on teacher quality would ulti-

mately result in increased funding and status for inservice training. An additional trend noted in 1986, and an encouraging one, was a movement away from extensive training of existing personnel in procedures and processes, such as IEP development, and from other awareness-level training, such as the meaning of mainstreaming. Instead, inservice training was increasingly focused on developing new skills or installing new programs.

Spokespersons for all jurisdictions cited the importance of Part D funding in their efforts to continue to provide inservice training. In fact, in most jurisdictions the existence of these discretionary monies were all that allowed states to provide any staff development at all. The critical lack of state dollars allocated for inservice training and the stability such monies would represent remained the most serious problem facing jurisdictions in 1986.

This report has presented the viewpoints of representatives of 57 educational jurisdictions on a diverse group of issues in special education. While it is not possible to succinctly summarize all these views and comments, the general tone of the follow-up interviews was one of cautious realism. The jurisdictions, seeing funds restored and a new era of public concern for educational excellence, were hopeful for increased benefits for education, which would in turn benefit special education. Clearly, there has been much activity among the jurisdictions in many areas, perhaps most visibly in certification and program expansion. Nonetheless, severe to critical shortages in special education manpower continue to limit efforts in program development and improvement and remain the major stumbling block in the provision of a free and appropriate education of the nation's handicapped children.